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<213> Homo sapiens

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<210> 162  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 162  
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 20 25 30  
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 35 40 45  
 Val Trp Trp Ser Phe Glu Tyr Phe Pro Pro Arg Thr Pro Gln Gly Met  
 50 55 60  
 Gln Asn Leu Tyr Asp Arg Ile Glu Arg Met Ser Gln Leu Gly Pro Glu  
 65 70 75 80  
 Phe Val Asp Ile Thr Trp Asn Ala Gly Gly Arg Thr Ser Asp Met Thr  
 85 90 95  
 Thr Gln Leu Val Lys Thr Val His Ala Tyr Phe Gly Val Glu Thr Cys  
 100 105 110  
 Met His Leu Thr Cys  
 115

<210> 163  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 163  
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 ccggcgatga ttccactgtg gatgttcccg atggcgattg cctgcggtaa cactttcgtg  
 180  
 ctcaaaccgt ccgaacaaga ccctctgtcg acgatgctgc tggtagaact ggcgctggaa  
 240  
 gccggtgtgc cggccggcgt gctcaacgtg gtgcacggcg gcaaggatgt ggtggatgcg  
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ctgtgcaccc ataaagatat caaggcagtt tctttcgtcg gttcgaccgc cgttggtacc  
360

<210> 164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 164

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		35					40					45			
Phe	Pro	Met	Ala	Ile	Ala	Cys	Gly	Asn	Thr	Phe	Val	Leu	Lys	Pro	Ser
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Glu	Gln	Asp	Pro	Leu	Ser	Thr	Met	Leu	Leu	Val	Glu	Leu	Ala	Leu	Glu
65					70					75				80	
Ala	Gly	Val	Pro	Ala	Gly	Val	Leu	Asn	Val	Val	His	Gly	Gly	Lys	Asp
				85					90					95	
Val	Val	Asp	Ala	Leu	Cys	Thr	His	Lys	Asp	Ile	Lys	Ala	Val	Ser	Phe
			100					105					110		
Val	Gly	Ser	Thr	Ala	Val	Gly	Thr								
			115				120								

<210> 165

<211> 728

<212> DNA

<213> Homo sapiens

<400> 165

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120  
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180  
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360  
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420  
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600  
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660



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720

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728

<210> 166

<211> 242

<212> PRT

<213> Homo sapiens

<400> 166

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			20					25					30		
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		35					40				45				
Met	Lys	Asp	Asn	Ser	Ser	Ser	Ser	Ser	Thr	Asp	Ser	Arg	Ser	Arg	Ser
	50					55					60				
Ser	Ser	Arg	Ser	Pro	Thr	Arg	His	Phe	Arg	Arg	Ser	Asp	Ser	His	Ser
65					70					75				80	
Asp	Ser	Asp	Ser	Ser	Tyr	Ser	Gly	Asn	Glu	Cys	His	Pro	Val	Gly	Arg
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Arg	Asn	Pro	Pro	Pro	Lys	Gly	Arg	Gly	Gly	Arg	Gly	Ala	His	Met	Asp
			100					105					110		
Arg	Gly	Arg	Gly	Arg	Ala	Gln	Arg	Gly	Lys	Arg	His	Asp	Leu	Ala	Pro
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Thr	Lys	Arg	Ser	Arg	Lys	Lys	Met	Ala	Ala	Leu	Glu	Cys	Glu	Asp	Pro
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Glu	Arg	Glu	Leu	Lys	Lys	Gln	Lys	Arg	Ala	Ala	Arg	Phe	Gln	His	Gly
145				150						155				160	
His	Ser	Arg	Arg	Leu	Arg	Leu	Glu	Pro	Leu	Val	Leu	Gln	Met	Ser	Ser
			165					170					175		
Leu	Glu	Ser	Ser	Gly	Ala	Asp	Pro	Asp	Trp	Gln	Glu	Leu	Gln	Ile	Val
		180					185						190		
Gly	Thr	Cys	Pro	Asp	Ile	Thr	Lys	His	Tyr	Leu	Arg	Leu	Thr	Cys	Ala
		195					200					205			
Pro	Asp	Pro	Ser	Thr	Val	Arg	Pro	Val	Ala	Phe	Pro	Val	Ala	Gly	Phe
	210					215					220				
Glu	Lys	Val	Ala	Val	His	Gly	Gln	Val	Pro	Leu	Glu	Arg	Glu	Ala	Gly
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Leu	Arg														

<210> 167

<211> 510

<212> DNA

<213> Homo sapiens

<400> 167

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120

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 ggcgtgcgga tcccgcggca ccagggggcc ggcatgggtg tcctcacatg gctgagcctg  
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 420  
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<210> 168  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 168  
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 Leu Ser Gln Pro Leu Leu Asp Gly Phe Ala Met Gly Ala Ser Val Thr  
 35 40 45  
 Ile Leu Thr Ser Gln Leu Lys His Leu Leu Gly Val Arg Ile Pro Arg  
 50 55 60  
 His Gln Gly Pro Gly Met Val Val Leu Thr Trp Leu Ser Leu Leu Arg  
 65 70 75 80  
 Gly Ala Gly Gln Ala Asn Val Cys Asp Val Val Thr Ser Thr Val Cys  
 85 90 95  
 Leu Ala Val Leu Leu Ala Ala Lys Glu Leu Ser Asp Arg Tyr Arg His  
 100 105 110  
 Arg Leu Arg Val Pro Leu Pro Thr Glu Leu Leu Val Ile Val Val Ala  
 115 120 125

<210> 169  
 <211> 537  
 <212> DNA  
 <213> Homo sapiens

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 240  
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ctgcgatcag tggcggtctgg ggtgcaacct gacatcgtea acgtccacta tgcgaccggt  
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 420  
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 537

<210> 170  
 <211> 164  
 <212> PRT  
 <213> Homo sapiens

<400> 170  
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 35 40 45  
 Val His Leu Ala Ser Val His Pro Ala Gly Arg His Ser Ile Asp Pro  
 50 55 60  
 Arg Val Arg Ile His Leu Ala Pro His Gly Gly Lys Ala Lys Tyr Val  
 65 70 75 80  
 Val Asn Ala Gly Trp Leu Arg Ser Val Ala Ala Gly Val Gln Pro Asp  
 85 90 95  
 Ile Val Asn Val His Tyr Ala Thr Gly Tyr Gly Leu Leu Ala Arg Leu  
 100 105 110  
 Ala His Ile Asp Ala Pro Thr Leu Leu Ser Val Trp Gly Ser Asp Val  
 115 120 125  
 Tyr Asp Ser Pro Arg Ala Asn Pro Leu Met Arg His Met Val Arg Ser  
 130 135 140  
 Asn Leu Val Ser Ala Thr Arg Ile Ala Ser Thr Ser His Cys Met Ala  
 145 150 155 160  
 Arg Val Thr Arg

<210> 171  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 171  
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 ggcgtcatcc ataccgactt ccagaagggg ttcacaaagg cccaggtggt gtccttcggc  
 180  
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 300

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 391

<210> 172  
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 <213> Homo sapiens

<400> 172  
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 Gly Asp Thr Ala Pro Glu Ala Ala Gly Val Ile His Thr Asp Phe Gln  
 35 40 45  
 Lys Gly Phe Ile Lys Ala Gln Val Val Ser Phe Gly Asp Leu Val Glu  
 50 55 60  
 Phe Gly Gly Glu Lys Glu Ala Gln Ala Ala Gly Lys Leu Arg Leu Glu  
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 85 90 95  
 Asn Val

<210> 173  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 173  
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 309

<210> 174  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 174  
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 Pro Cys Arg Ser Gln Ser Arg Ala Ile Ser Gln Glu Ser Arg Lys Gly

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	35		40		45										
Thr	Gln	Pro	Thr	Ser	Pro	Pro	Cys	Leu	Gly	Leu	Cys	Phe	Leu	Phe	Asp
	50		55		60										
Thr	Gly	Lys	Gln	Gly	Gly	Ala	Asp	Gln	Arg	Leu	Arg	Pro	Val	Gly	Cys
65			70		75									80	
Gly	Gly	Val	Pro	Cys	Val	Ser	Gly	Lys	Pro	Arg	Thr	Leu	Gly	Cys	Thr
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Trp	Val	Ser	Phe	Ala	Val										
	100														

&lt;210&gt; 175

&lt;211&gt; 8484

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 175

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1080

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&lt;210&gt; 176

&lt;211&gt; 1393

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 176

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Ser	Met	Tyr	Leu	Ala	Met	Pro	Val	Thr	Asn	Ala	Phe	Leu	Ser	Ser	Lys
			35				40					45			
Phe	Val	Ser	Lys	Leu	Ala	Trp	Tyr	Met	Met	Glu	Glu	Gly	Gly	Gly	Ser
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Met	His	Gly	Cys	Trp	Ser	Gly	Arg	Gly	Ser	Ser	Ser	Ser	Arg	Ser	Thr
65					70				75					80	
Leu	Asp	Arg	Ala	Ser	Ser	Arg	Val	Thr	Cys	Val	Val	Met	Ala	Ala	Val
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Ser	Val	Phe	Cys	Thr	Gly	Ser	Ala	Ala	Gly	Pro	Gly	Glu	Gly	Pro	Glu
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Glu	Val	Ile	Ala	Met	Ile	Lys	Gly	Leu	Gln	Val	Leu	Met	Gly	Arg	Met
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Gln	Asp	Phe	Ser	Gln	Val	Thr	Leu	Arg	Glu	Pro	Leu	Arg	Gln	Ala	Ile
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Lys	Lys	Lys	Lys	Asn	Val	Ile	Gln	Ser	Val	Leu	Gln	Ala	Ile	Arg	Lys
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Thr	Val	Cys	Asp	Trp	Glu	Thr	Gly	His	Glu	Pro	Phe	Asn	Asp	Pro	Ala
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Leu	Arg	Gly	Glu	Lys	Asp	Pro	Lys	Ser	Gly	Phe	Asp	Ile	Lys	Val	Pro
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Arg	Arg	Ala	Val	Gly	Pro	Ser	Ser	Thr	Gln	Leu	Tyr	Met	Val	Arg	Thr
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Arg	Ser	Ser	Leu	Glu	Gly	Pro	Thr	Ile	Leu	Asp	Ile	Glu	Lys	Phe	His
				725					730					735	
Arg	Glu	Ser	Phe	Phe	Tyr	Thr	His	Leu	Ile	Asn	Phe	Ser	Glu	Thr	Leu
			740					745					750		
Gln	Gln	Cys	Cys	Asp	Leu	Ser	Gln	Leu	Trp	Phe	Arg	Glu	Phe	Phe	Leu
		755					760					765			
Glu	Leu	Thr	Met	Gly	Arg	Arg	Ile	Gln	Phe	Pro	Ile	Glu	Met	Ser	Met
	770					775					780				
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Met	Glu	Tyr	Val	Leu	Tyr	Ser	Leu	Asp	Leu	Tyr	Asn	Asp	Ser	Ala	His
			805						810					815	
Tyr	Ala	Leu	Thr	Arg	Phe	Asn	Lys	Gln	Phe	Leu	Tyr	Asp	Glu	Ile	Glu
			820					825					830		
Ala	Glu	Val	Asn	Leu	Cys	Phe	Asp	Gln	Phe	Val	Tyr	Lys	Leu	Ala	Asp
		835					840					845			
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	850					855					860				
Lys	Arg	Leu	Arg	Ser	Glu	Cys	Lys	Asn	Gln	Gly	Ala	Thr	Ile	His	Leu
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Pro	Pro	Ser	Asn	Arg	Tyr	Glu	Thr	Leu	Leu	Lys	Gln	Arg	His	Val	Gln
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Ser	Ala	Ala	Met	Tyr	Lys	Ser	Leu	Glu	Leu	Ala	Ile	Gly	Arg	Phe	Glu
		915					920					925			
Ser	Glu	Asp	Leu	Thr	Ser	Ile	Val	Glu	Leu	Asp	Gly	Leu	Leu	Glu	Ile
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Phe	Asp	Ala	Met	Phe	Arg	Glu	Ala	Asn	His	Asn	Val	Ser	Ala	Pro	Tyr
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Gly	Arg	Ile	Thr	Leu	His	Val	Phe	Trp	Glu	Leu	Asn	Tyr	Asp	Phe	Leu

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Pro Asn Tyr	Cys Tyr Asn Gly Ser Thr Asn Arg Phe Val Arg Thr Val				
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Leu Pro Phe Ser Gln Glu Phe Gln Arg Asp Lys Gln Pro Asn Ala Gln					
1010	1015		1020		
Pro Gln Tyr Leu His Gly Ser Lys Ala Leu Asn Leu Ala Tyr Ser Ser					
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Ile Tyr Gly Ser Tyr Arg Asn Phe Val Gly Pro Pro His Phe Gln Val					
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Ile Cys Arg Leu Leu Gly Tyr Gln Gly Ile Ala Val Val Met Glu Glu					
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Leu Leu Lys Val Val Lys Ser Leu Leu Gln Gly Thr Ile Leu Gln Tyr					
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Val Lys Thr Leu Met Glu Val Met Pro Lys Ile Cys Arg Leu Pro Arg					
1090	1095		1100		
His Glu Tyr Gly Ser Pro Gly Ile Leu Glu Phe Phe His His Gln Leu					
1105	1110		1115		1120
Lys Asp Ile Val Glu Tyr Ala Glu Leu Lys Thr Val Cys Phe Gln Asn					
1125		1130		1135	
Leu Arg Glu Val Gly Asn Ala Ile Leu Phe Cys Leu Leu Ile Glu Gln					
1140	1145		1150		
Ser Leu Ser Leu Glu Glu Val Cys Asp Leu Leu His Ala Ala Pro Phe					
1155	1160		1165		
Gln Asn Ile Leu Pro Arg Val His Val Lys Glu Gly Glu Arg Leu Asp					
1170	1175		1180		
Ala Lys Met Lys Arg Leu Glu Ser Lys Tyr Ala Pro Leu His Leu Val					
1185	1190		1195		1200
Pro Leu Ile Glu Arg Leu Gly Thr Pro Gln Gln Ile Ala Ile Ala Arg					
1205		1210		1215	
Glu Gly Asp Leu Leu Thr Lys Glu Arg Leu Cys Cys Gly Leu Ser Met					
1220	1225		1230		
Phe Glu Val Ile Leu Thr Arg Ile Arg Ser Phe Leu Asp Asp Pro Ile					
1235	1240		1245		
Trp Arg Gly Pro Leu Pro Ser Asn Gly Val Met His Val Asp Glu Cys					
1250	1255		1260		
Val Glu Phe His Arg Leu Trp Ser Ala Met Gln Phe Val Tyr Cys Ile					
1265	1270		1275		1280
Pro Val Gly Thr His Glu Phe Thr Val Glu Gln Cys Phe Gly Asp Gly					
1285		1290		1295	
Leu His Trp Ala Gly Cys Met Ile Ile Val Leu Leu Gly Gln Gln Arg					
1300	1305		1310		
Arg Phe Ala Val Leu Asp Phe Cys Tyr His Leu Leu Lys Val Gln Lys					
1315	1320		1325		
His Asp Gly Lys Asp Glu Ile Ile Lys Asn Val Pro Leu Lys Lys Met					
1330	1335		1340		
Val Glu Arg Ile Arg Lys Phe Gln Ile Leu Asn Asp Glu Ile Ile Thr					
1345	1350		1355		1360
Ile Leu Asp Lys Tyr Leu Lys Ser Gly Asp Gly Glu Gly Thr Pro Val					
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Glu His Val Arg Cys Phe Gln Pro Pro Ile His Gln Ser Leu Ala Ser					
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 <212> DNA  
 <213> Homo sapiens

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 atacttgagt tcttatatgc taccggcgcg cgcgtgagcg agatgctggc aacagacctg  
 300  
 gacgatatac acctgggcga aaaacccgcg gatgaaaacg gggaatctat tgcacttccc  
 360  
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<210> 178  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 178  
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 Arg Ile Leu Glu Thr Asp Pro Ala Ala Val Lys Pro Pro Lys Asn  
 35 40 45  
 Val Lys Arg Leu Pro Lys Ala Val Ser Val Glu Gln Met Gln Lys Leu  
 50 55 60  
 Leu Ala Ile Pro Ser Leu Lys Thr Pro Thr Gly Leu Arg Asn Arg Ala  
 65 70 75 80  
 Ile Leu Glu Phe Leu Tyr Ala Thr Gly Ala Arg Val Ser Glu Met Leu  
 85 90 95  
 Ala Thr Asp Leu Asp Asp Ile His Leu Gly Glu Lys Pro Arg Asp Glu  
 100 105 110  
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 115 120 125  
 Gly Gly Lys Glu Arg Leu Val Pro Leu Gly Ser  
 130 135

<210> 179  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

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 <211> 108  
 <212> PRT  
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<400> 180  
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 35 40 45  
 Pro Tyr His Thr Pro Thr Gly Arg Ala Pro Thr Phe Trp Ile Arg Ala  
 50 55 60  
 Ala Arg Pro Asn Gly Glu Phe Pro Asp Ser Trp Gly Cys Gly Ile Phe  
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 His His Gln Pro Thr Gly Asn His Leu Arg Leu Phe Gln Gly Leu Arg  
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 Asp Val Ile Asp Arg Pro His Arg His Leu Arg Arg  
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<210> 181  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

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 180  
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<210> 182  
 <211> 99  
 <212> PRT

<213> Homo sapiens

<400> 182

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Phe Pro Cys Met Pro Ile His Leu Ser Val Gln Ala Asn Thr Val Asn
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Trp Ala Ser Val Glu Phe Trp Gln Gln Gly Ile Cys Arg Val Ile
      35             40             45
Leu Ser Arg Glu Leu Ser Leu Glu Glu Ile Gly Glu Ile Arg Gln Gln
      50             55             60
Val Pro Ala Met Glu Leu Glu Val Phe Val His Gly Ala Leu Tyr Met
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Ala Tyr Ser Gly Arg Cys Leu Leu Ser Gly Tyr Met Asn Lys Arg Asp
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Ala Asn Gln

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<210> 183

<211> 351

<212> DNA

<213> Homo sapiens

<400> 183

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120
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180
gccgagggcc acgactacgc acaccccgac tacggcggca acgtctccca ccgtgccggc
240
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351

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<210> 184

<211> 117

<212> PRT

<213> Homo sapiens

<400> 184

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      20             25             30
Phe Leu Arg Thr Leu Asp Asp Val Lys Arg Ile Ser Leu Ala Thr Asp
      35             40             45
Gly Leu Gly His Gln Val Leu Leu Lys Gly Tyr Gln Ala Glu Gly His
      50             55             60
Asp Tyr Ala His Pro Asp Tyr Gly Gly Asn Val Ser His Arg Ala Gly
65             70             75             80
Gly Met Lys Asp Leu Glu Lys Leu Thr Glu Ser Gly Arg Gln Trp Asn

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Thr Asp Phe Gly Ile His Val Asn Leu Val Glu Ser Tyr Pro Glu Ala					
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Asn His Phe Gly Asp					
	115				

<210> 185  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<400> 185  
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 gggccacggt ataagcgcag caaattagaa agaagagcaa acacagatgt cctctggtgt  
 180  
 gtcattgttc tggtcataat gtgcttaact ggcgcagtag gtcattggaat ctggctgagc  
 240  
 aggtatgaaa agatgcattt tttcaatggt cccgagcctg atggacatat catatcacca  
 300  
 ctggtggcag gattttatat gttttggacc gtgatcattt tggtacaggt cttgattcct  
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<210> 186  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 186  
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 Arg Asn Thr Glu Ala Val Val Gly Ile Val Val Tyr Ala Gly His Glu  
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 35 40 45  
 Leu Glu Arg Arg Ala Asn Thr Asp Val Leu Trp Cys Val Met Leu Leu  
 50 55 60  
 Val Ile Met Cys Leu Thr Gly Ala Val Gly His Gly Ile Trp Leu Ser  
 65 70 75 80  
 Arg Tyr Glu Lys Met His Phe Phe Asn Val Pro Glu Pro Asp Gly His  
 85 90 95  
 Ile Ile Ser Pro Leu Leu Ala Gly Phe Tyr Met Phe Trp Thr Val Ile  
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 Ile Leu Leu Gln Val Leu Ile Pro Ile Ser Leu Tyr Val Ser Ile Glu  
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 Ile Val Lys Leu  
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<210> 187  
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 187

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<210> 188

<211> 141

<212> PRT

<213> Homo sapiens

<400> 188

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35     40     45
Thr Val Gly Asp Gln Glu Val Ile Glu Ala Ala Arg Arg Gly Asp Arg
50     55     60
Ser Ile Ala Asp Ala Val Glu Thr Asn Gly Ile Leu Thr Ala Arg Thr
65     70     75     80
Asp Thr Pro Leu Ser Glu Leu Phe Ala Pro Thr Ser Asn Ala Arg Val
85     90     95
Pro Leu Ala Val Val Asp Glu Asp Phe His Leu Met Gly Val Ile Ser
100    105    110
Arg Val Thr Leu Leu Asp Ala Met Ser Arg Ala Arg Asp Glu Ala Gly
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<210> 189

<211> 429

<212> DNA

<213> Homo sapiens

<400> 189

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 <213> Homo sapiens

<400> 190  
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 35 40 45  
 Trp Gly Lys Ala Leu Leu Phe Leu Val Leu Ser Leu Ile Tyr Leu Ala  
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 65 70 75 80  
 Ile Gly Glu Ile Gly Gly Thr Thr Ala Ser Lys Gln Val Glu Ala Gly  
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<210> 192

<211> 428

<212> PRT

<213> Homo sapiens

<400> 192

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			20					25					30		
Gly	Gln	Ser	Ala	Ala	Asp	Ile	Leu	Ser	Gly	Ala	Ala	Ser	Arg	Arg	Arg

	35						40				45						
Tyr	Leu	Leu	Tyr	Asp	Val	Asn	Pro	Pro	Glu	Gly	Phe	Asn	Leu	Arg	Arg		
	50					55					60						
Asp	Val	Tyr	Ile	Arg	Ile	Ala	Ser	Leu	Leu	Lys	Thr	Leu	Leu	Lys	Thr		
65					70					75					80		
Glu	Glu	Trp	Val	Leu	Val	Leu	Pro	Pro	Trp	Gly	Arg	Leu	Tyr	His	Trp		
				85					90					95			
Gln	Ser	Pro	Asp	Ile	His	Gln	Val	Arg	Ile	Pro	Trp	Ser	Glu	Phe	Phe		
			100					105					110				
Asp	Leu	Pro	Ser	Leu	Asn	Lys	Asn	Ile	Pro	Val	Ile	Glu	Tyr	Glu	Gln		
		115					120					125					
Phe	Ile	Ala	Glu	Ser	Gly	Gly	Pro	Phe	Ile	Asp	Gln	Val	Tyr	Val	Leu		
	130					135					140						
Gln	Ser	Tyr	Ala	Glu	Gly	Trp	Lys	Glu	Gly	Thr	Trp	Glu	Glu	Lys	Val		
145					150					155					160		
Asp	Glu	Arg	Pro	Cys	Ile	Asp	Gln	Leu	Leu	Tyr	Ser	Gln	Asp	Lys	His		
				165				170						175			
Glu	Tyr	Tyr	Arg	Gly	Trp	Phe	Trp	Gly	Tyr	Glu	Glu	Thr	Arg	Gly	Leu		
			180					185					190				
Asn	Val	Ser	Cys	Leu	Ser	Val	Gln	Gly	Ser	Ala	Ser	Ile	Val	Ala	Pro		
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Leu	Leu	Leu	Arg	Asn	Thr	Ser	Ala	Arg	Ser	Val	Met	Leu	Asp	Arg	Ala		
	210					215					220						
Glu	Asn	Leu	Leu	His	Asp	His	Tyr	Gly	Gly	Lys	Glu	Tyr	Trp	Asp	Thr		
225					230					235					240		
Arg	Arg	Ser	Met	Val	Phe	Ala	Arg	His	Leu	Arg	Glu	Val	Gly	Asp	Glu		
				245						250				255			
Phe	Arg	Ser	Arg	His	Leu	Asn	Ser	Thr	Asp	Asp	Ala	Asp	Arg	Ile	Pro		
			260					265					270				
Phe	Gln	Glu	Asp	Trp	Met	Lys	Met	Lys	Val	Lys	Leu	Gly	Ser	Ala	Leu		
		275					280					285					
Gly	Gly	Pro	Tyr	Leu	Gly	Val	His	Leu	Arg	Arg	Lys	Asp	Phe	Ile	Trp		
	290					295					300						
Gly	His	Arg	Gln	Asp	Val	Pro	Ser	Leu	Glu	Gly	Ala	Val	Arg	Lys	Ile		
305					310					315					320		
Arg	Ser	Leu	Met	Lys	Thr	His	Arg	Leu	Asp	Lys	Val	Phe	Val	Ala	Thr		
				325					330					335			
Asp	Ala	Val	Arg	Lys	Glu	Tyr	Glu	Glu	Leu	Lys	Lys	Leu	Leu	Pro	Glu		
			340					345					350				
Met	Val	Arg	Phe	Glu	Pro	Thr	Trp	Glu	Glu	Leu	Glu	Leu	Tyr	Lys	Asp		
		355					360					365					
Gly	Gly	Val	Ala	Ile	Ile	Asp	Gln	Trp	Ile	Cys	Ala	His	Ala	Arg	Cys		
	370					375					380						
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<210> 193
<211> 350
<212> DNA
<213> Homo sapiens
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 cgtgccagca tcagccccga ggaggtcaag ggcgagacca tgttgatggt gggcacgggc  
 180  
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 240  
 ccgttaaggg catacgccgc agtttcgagg gctcgtcgtt ggagaccatc aagcacatcg  
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<210> 194  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

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 Arg Ala Ser His Pro Leu Ala Asp Arg Ala Ser Ile Ser Pro Glu Glu  
 35 40 45  
 Val Lys Gly Glu Thr Met Leu Met Leu Gly Thr Gly Pro Trp Phe Pro  
 50 55 60  
 Arg Ala Arg Gly Gly Gly Leu Ala Arg Ile Trp Arg Val Ser Pro Ala  
 65 70 75 80  
 Pro Leu Arg Ala Tyr Ala Ala Val Ser Arg Ala Arg Arg Trp Arg Pro  
 85 90 95  
 Ser Ser Thr Ser Trp Leu Arg Ala Trp Arg Asp Gly Gly Ala Ala Ala  
 100 105 110  
 Val Arg Ala Ala  
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<210> 195  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

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<210> 196  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 196  
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 20 25 30  
 Arg Leu Ala Ser Gly Val Leu Glu Pro Glu Leu Gly Asp Asp Leu Ala  
 35 40 45  
 Ala Val Leu Leu Asp Ser His Arg Val Ala Val Ile Ser Glu Gly Ser  
 50 55 60  
 Asn Trp Leu Ala Ser Leu Pro Val Ile Val Gly Arg Asn Thr Glu Gln  
 65 70 75 80  
 Phe Arg Ser Ile Pro Asp Leu Ala Arg Asp Arg Ile Asp Lys Leu His  
 85 90 95  
 Gln Leu Ser His Arg Glu Ile Ala Arg Asn Arg Glu Leu Leu Arg Ala  
 100 105 110  
 Arg Ala Ala Ser Gly Gln Val Arg His Cys His Gly Asp Ala His Leu  
 115 120 125  
 Gly Asn Ile Val Met Ile Asp Gly Lys Pro Val Leu Phe Asp Ala Ile  
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 Phe Pro Leu Met Asp  
 165

<210> 197  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

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<210> 198

<211> 134

<212> PRT

<213> Homo sapiens

<400> 198

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Ile	Pro	Ala	Ile	Lys	Gly	Ile	Asn	Pro	Asp	Glu	Thr	Glu	Gly	Glu	Arg
			20					25					30		
His	Ala	Ser	Asp	Asp	Glu	Pro	Phe	Ser	Ser	Leu	Ala	Phe	Lys	Ile	Ala
		35					40					45			
Thr	Asp	Pro	Phe	Val	Gly	Asn	Leu	Thr	Phe	Phe	Arg	Val	Tyr	Ser	Gly
	50					55					60				
Val	Ile	Asn	Ser	Gly	Asp	Thr	Val	Leu	Asn	Ser	Val	Arg	Gln	Lys	Arg
65					70					75				80	
Glu	Arg	Phe	Gly	Arg	Ile	Val	Gln	Met	His	Ala	Asn	Lys	Arg	Glu	Glu
				85					90				95		
Ile	Lys	Glu	Val	Arg	Ala	Gly	Asp	Ile	Ala	Ala	Ala	Ile	Gly	Leu	Lys
			100					105					110		
Asp	Val	Thr	Thr	Gly	Glu	Pro	Leu	Cys	Ala	Val	Asp	Ala	Pro	Ile	Ile
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<210> 199

<211> 507

<212> DNA

<213> Homo sapiens

<400> 199

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 507

<210> 200  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 200  
 Met Glu Gly Glu Glu Ala Ala Phe Leu Pro Glu Gly Pro Ser Ser Pro  
 1 5 10 15  
 Trp Phe Ile Val Ser Ser Ser Ser Ser Leu Ser Thr Ile Leu Arg Glu  
 20 25 30  
 Gly Arg Gly Ser Asn Thr Arg Glu Ser Leu Ser Glu Val Glu Ser Ile  
 35 40 45  
 Glu Cys Phe Ser Gly Pro Glu Val Glu Ser Glu Asp Arg Ser Ile Arg  
 50 55 60  
 Ser Lys Ser Ser Leu Gly Ala Gly Phe Thr Gly Glu Ser Thr Phe Thr  
 65 70 75 80  
 Ser Lys Val Ser Ile Gln Phe Asn Leu Thr Ser Gly Met Thr Gly Leu  
 85 90 95  
 Arg Ala Ser Gly Asn Pro Ser Ile Ala Gly Phe Ser Gly Ile Ser Leu  
 100 105 110  
 Leu Ser Gly Leu Val Ala Glu Phe Cys Leu Glu Arg Pro Gly Ser Leu  
 115 120 125  
 Gly Leu Cys Ala Ile Tyr Ala Ala Trp Val Gly Gly Phe Ser Met Ser  
 130 135 140  
 His Arg Ser Met His Asp Phe Thr Arg  
 145 150

<210> 201  
 <211> 527  
 <212> DNA  
 <213> Homo sapiens

<400> 201  
 gatgtggcta ttatccctgt ttcccaggtg agaaacaggg tcagtgatag agctgggatg  
 60  
 tgtgcctgca ggctcaccag ccagtcacct cctcaccaag gatgatgttc tccgtgggtga  
 120  
 gctggtcctt ggtctcctgg aactcgtggc gcacctgggc cagctgcgcc tcgaaggcat  
 180  
 ccttctccat ctctttggct agctgcaagt tctggagctg ctctgtgagg tctgtgatct  
 240  
 catccacctg ctggttgagc gtgcgcttga ggaaggccac aatctccttc ttgttattgg  
 300  
 ccagctgctc aaactcctgg cggaacatct tctcctgcac agccagctca tcccacttcc  
 360  
 gctggtaccg ggctagccgg tctccaggt ctcgatctg gatgtggtag aactccttca  
 420  
 tctccttggc cagaggcggc tccacggcca ccaccggctc cttcttgccc cctttcttct  
 480  
 tgacttcaag ctcttgctt gccttgetca cactcttttt gggaggc  
 527

<210> 202

<211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Gly Arg Pro Gln Ser Pro Ser Cys Tyr Trp Pro Ala Ala Gln Thr Pro  
 1 5 10 15  
 Gly Gly Thr Ser Ser Pro Ala Gln Pro Ala His Pro Thr Ser Ala Gly  
 20 25 30  
 Thr Gly Leu Ala Gly Pro Pro Gly Leu Gly Ser Gly Cys Gly Arg Thr  
 35 40 45  
 Pro Ser Ser Pro Trp Pro Glu Ala Ala Pro Arg Pro Pro Pro Ala Pro  
 50 55 60  
 Ser Cys Pro Leu Ser Ser  
 65 70

<210> 203  
 <211> 304  
 <212> DNA  
 <213> Homo sapiens

<400> 203  
 ngtgcaccgg tggatcatgga caacgccgcc tacgtggtct acacctcggg atccaccggc  
 60  
 cgacccaagg gagttgtcgt caccacacacc ggactcgaca gcttcgcact cgaccagcag  
 120  
 cgtcgattcc acgcagatca ccactctcga accctgcact tcgccacccc cagcttcgac  
 180  
 ggagccgtct tcgagtacct gcaggcattc ggtgtcggag ccaccatggt gatcgtcccg  
 240  
 accgacatct acggcgggcg cgaactggca agtctcatcc gccgcgaaca cgtcactcac  
 300  
 gcgt  
 304

<210> 204  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 204  
 Xaa Ala Pro Val Val Met Asp Asn Ala Ala Tyr Val Val Tyr Thr Ser  
 1 5 10 15  
 Gly Ser Thr Gly Arg Pro Lys Gly Val Val Val Thr His Thr Gly Leu  
 20 25 30  
 Asp Ser Phe Ala Leu Asp Gln Gln Arg Arg Phe His Ala Asp His His  
 35 40 45  
 Ser Arg Thr Leu His Phe Ala Thr Pro Ser Phe Asp Gly Ala Val Phe  
 50 55 60  
 Glu Tyr Leu Gln Ala Phe Gly Val Gly Ala Thr Met Val Ile Val Pro  
 65 70 75 80  
 Thr Asp Ile Tyr Gly Gly Ala Glu Leu Ala Ser Leu Ile Arg Arg Glu  
 85 90 95  
 His Val Thr His Ala

100

<210> 205  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 205  
 nngaattcag caatgataac tggctcaatt gaaggtaaga caacaattga gggaattaat  
 60  
 gcacaattaa atacagtgtt aactttatctt tcaccacaat caaaagataa agatttaatc  
 120  
 atgccagatc aacaagaaga aatagatatt ctgattgcaa ccgactgtat ttcagaagga  
 180  
 cagaacttac aagattgtga ttacttaata aactatgaca ttcattggaa tccagttcgt  
 240  
 atcattcaaa gatttggacg gattgatcga attgggtcga agaataaatg tgtacaatta  
 300  
 gttaactttt ggccagatat tacattagat gaatatattg atctaaaggg acgcgt  
 356

<210> 206  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<400> 206  
 Xaa Asn Ser Ala Met Ile Thr Gly Ser Ile Glu Gly Lys Thr Thr Ile  
 1 5 10 15  
 Glu Gly Ile Asn Ala Gln Leu Asn Thr Val Leu Thr Leu Phe Ser Pro  
 20 25 30  
 Gln Ser Lys Asp Lys Asp Leu Ile Met Pro Asp Gln Gln Glu Glu Ile  
 35 40 45  
 Asp Ile Leu Ile Ala Thr Asp Cys Ile Ser Glu Gly Gln Asn Leu Gln  
 50 55 60  
 Asp Cys Asp Tyr Leu Ile Asn Tyr Asp Ile His Trp Asn Pro Val Arg  
 65 70 75 80  
 Ile Ile Gln Arg Phe Gly Arg Ile Asp Arg Ile Gly Ser Lys Asn Lys  
 85 90 95  
 Cys Val Gln Leu Val Asn Phe Trp Pro Asp Ile Thr Leu Asp Glu Tyr  
 100 105 110  
 Ile Asp Leu Lys Gly Arg  
 115

<210> 207  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 207  
 acgcgtgcac tgtgtgtatg catggtaacg tacacgtgtg cactgtgtgt ggtgtgcatg  
 60  
 catggtgtgt gcacgtgtng cactgtgtgt ggatgcatgg taatgtgcac gtgtgcactg  
 120

tgtgtggtgt gtatgcatgg tgtgtgcacg tgtgcactgt gtgtgtgtgt atgcatgtgt  
 180  
 gtgcacatgt gcactgtgtg gtgtgtatgc atggtgtgtg cacgtgtgca ctgtgtatgc  
 240  
 atgngtgtgt gcatgtgtgc actgtgtatg catagtgtgc acgtgtgcac tgtgtggtgt  
 300  
 gtatgcatgg taatgtgcac gtgt  
 324

<210> 208  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 208  
 Thr Arg Ala Leu Cys Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys  
 1 5 10 15  
 Val Val Cys Met His Gly Val Cys Thr Cys Xaa Thr Val Cys Gly Cys  
 20 25 30  
 Met Val Met Cys Thr Cys Ala Leu Cys Val Val Cys Met His Gly Val  
 35 40 45  
 Cys Thr Cys Ala Leu Cys Val Cys Val Cys Met Cys Val His Met Cys  
 50 55 60  
 Thr Val Trp Cys Val Cys Met Val Cys Ala Arg Val His Cys Val Cys  
 65 70 75 80  
 Met Xaa Val Cys Met Cys Ala Leu Cys Met His Ser Val His Val Cys  
 85 90 95  
 Thr Val Trp Cys Val Cys Met Val Met Cys Thr Cys  
 100 105

<210> 209  
 <211> 168  
 <212> DNA  
 <213> Homo sapiens

<400> 209  
 nnctccagag gttatgaggt tggaagcccg gtttttttca ggtgcagaaa aggetaccat  
 60  
 attcaagggt ccacgactcg cacctgcctt gccaatataa catggagtgg gatacagacc  
 120  
 gaatgtatac ctcatgcctg cagacagcca gaaaccccg caccgcg  
 168

<210> 210  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 210  
 Xaa Ser Arg Gly Tyr Glu Val Gly Ser Pro Val Phe Phe Arg Cys Arg  
 1 5 10 15  
 Lys Gly Tyr His Ile Gln Gly Ser Thr Thr Arg Thr Cys Leu Ala Asn  
 20 25 30  
 Leu Thr Trp Ser Gly Ile Gln Thr Glu Cys Ile Pro His Ala Cys Arg

35 40 45  
 Gln Pro Glu Thr Pro Ala His Ala  
 50 55

<210> 211  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 211  
 tacatgggct ttgacacagt ggtggctgaa gctgcactaa ggggtgtttgg aggcaatgtc  
 60  
 cagctggcag ctcagaccct tgcacaccat ggaggaagcc tcccaccga cctgcagttc  
 120  
 tcaggagagg actcctcccc cacaccgtcc acatccccat ctgactctgc agggacctct  
 180  
 agtgcctcga cagatgaaga catggagacg gaggctgtca acgaaatcct ggaggacatt  
 240  
 ccggagcacg aggaggacta cctggactcc acgctggagg atgaagaagt cattattgct  
 300  
 gaatacttgt cctgcgttga aagtataagt tctgccngca aagaacaact gatc  
 354

<210> 212  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<400> 212  
 Tyr Met Gly Phe Asp Thr Val Val Ala Glu Ala Ala Leu Arg Val Phe  
 1 5 10 15  
 Gly Gly Asn Val Gln Leu Ala Ala Gln Thr Leu Ala His His Gly Gly  
 20 25 30  
 Ser Leu Pro Pro Asp Leu Gln Phe Ser Gly Glu Asp Ser Ser Pro Thr  
 35 40 45  
 Pro Ser Thr Ser Pro Ser Asp Ser Ala Gly Thr Ser Ser Ala Ser Thr  
 50 55 60  
 Asp Glu Asp Met Glu Thr Glu Ala Val Asn Glu Ile Leu Glu Asp Ile  
 65 70 75 80  
 Pro Glu His Glu Glu Asp Tyr Leu Asp Ser Thr Leu Glu Asp Glu Glu  
 85 90 95  
 Val Ile Ile Ala Glu Tyr Leu Ser Cys Val Glu Ser Ile Ser Ser Ala  
 100 105 110  
 Xaa Lys Glu Gln Leu Ile  
 115

<210> 213  
 <211> 669  
 <212> DNA  
 <213> Homo sapiens

<400> 213  
 attgcccaat ctcagagtgt ccaggaaagc ctggagagcc tgttgagtc tattggggaa  
 60

gttgaacaaa acctggaagg gaaacaggtg tcatcactct catcaggagt catccaggaa  
 120  
 gccttagcca caaatatgaa attgaagcag gacattgctc ggcaaaagag cagcttggag  
 180  
 gccacccgtg agatggtgac ccgattcatg gagacagcag acagtactac agcagcagtg  
 240  
 ctgcagggca aactggcaga ggtgagccag cggttcgaac agctctgtct acagcagcaa  
 300  
 gaaaaggaga gctccctaaa gaagcttcta ccccaggcag agatgtttga acacctctct  
 360  
 ggtaagctgc agcagttcat ggaaaacaaa agtcggatgc tggcctctgg aaatcagcca  
 420  
 gatcaagata ttacacattt cttccaacag atccaggagc tcaatttgga aatggaagac  
 480  
 caacaggaga acctagatac tcttgagcac ctggtcactg aactgagctc ttgtggcttt  
 540  
 gcgctggact tgtgccagca tcaggacagg gtacagaatc taagaaaaga cttcacagag  
 600  
 ctacagaaga cagttaaaga gagagagaaa gatgcatcat cttgccagga acagttggat  
 660  
 gaattccgg  
 669

<210> 214  
 <211> 223  
 <212> PRT  
 <213> Homo sapiens

<400> 214  
 Ile Ala Gln Ser Gln Ser Val Gln Glu Ser Leu Glu Ser Leu Leu Gln  
 1 5 10 15  
 Ser Ile Gly Glu Val Glu Gln Asn Leu Glu Gly Lys Gln Val Ser Ser  
 20 25 30  
 Leu Ser Ser Gly Val Ile Gln Glu Ala Leu Ala Thr Asn Met Lys Leu  
 35 40 45  
 Lys Gln Asp Ile Ala Arg Gln Lys Ser Ser Leu Glu Ala Thr Arg Glu  
 50 55 60  
 Met Val Thr Arg Phe Met Glu Thr Ala Asp Ser Thr Thr Ala Ala Val  
 65 70 75 80  
 Leu Gln Gly Lys Leu Ala Glu Val Ser Gln Arg Phe Glu Gln Leu Cys  
 85 90 95  
 Leu Gln Gln Gln Glu Lys Glu Ser Ser Leu Lys Lys Leu Leu Pro Gln  
 100 105 110  
 Ala Glu Met Phe Glu His Leu Ser Gly Lys Leu Gln Gln Phe Met Glu  
 115 120 125  
 Asn Lys Ser Arg Met Leu Ala Ser Gly Asn Gln Pro Asp Gln Asp Ile  
 130 135 140  
 Thr His Phe Phe Gln Gln Ile Gln Glu Leu Asn Leu Glu Met Glu Asp  
 145 150 155 160  
 Gln Gln Glu Asn Leu Asp Thr Leu Glu His Leu Val Thr Glu Leu Ser  
 165 170 175  
 Ser Cys Gly Phe Ala Leu Asp Leu Cys Gln His Gln Asp Arg Val Gln  
 180 185 190  
 Asn Leu Arg Lys Asp Phe Thr Glu Leu Gln Lys Thr Val Lys Glu Arg



	195		200		205									
Glu	Lys	Asp	Ala	Ser	Ser	Cys	Gln	Glu	Gln	Leu	Asp	Glu	Phe	Arg
	210					215					220			

&lt;210&gt; 215

&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 215

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aaatttcgta cccgctccgg cacagtacga gcccttgacg atgtgagcct ggctattaag
60
agagggttcca tctcagccgt tatcgggcac tccggagccg gcaaaccac cctgggttcg
120
ctcatcaacg gattagagac tcccacgcgt ggccgcgtct tggtagacgg caccgacgtc
180
tcgcagctct cggacaaaagc gatgcgcccg ctacgcgcag acatcgggat gatcttccaa
240
cagttcaacc tattcggctc aaggaccatc tacgacaacg ttgcctatcc actcaagctg
300
gctcattgga agaaagcaga cgagaagaag cgcgtcaccg aattgctgag ctctcgtcggg
360
ttgacgagca aagcctggga ccatccagac cagctctcgg gcggacagaa acagcggggt
420
ggtattgccc gagcgctagc aactaaacca tcgattttgt tggctgacga gtccacctcg
480
gcgctggatc cagaaacgac agctgatgtc ctatccctgc tcaagcgggt caatgcggaa
540
ctaggggtga cggtcgtcgt catcaccac gagatggagg tcgtccgctc gattgcccag
600
caggtctcgg tactagcagc tggccatctc gtcgagtctg gaagcgcgccg ccaggtcttc
660
gtcatccac agtcagagac caccacgcgt ttcctggcga cgattatcgg ccagcaccgg
720
agtggggagg aacaggcacg gttgcagtcg gaaaaccag atgcacgact cgtcgacgtc
780
agttcggtgg ccagtcactc gttcggtgac gcgt
814

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&lt;210&gt; 216

&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 216

Lys	Phe	Arg	Thr	Arg	Ser	Gly	Thr	Val	Arg	Ala	Leu	Asp	Asp	Val	Ser
1				5				10						15	
Leu	Ala	Ile	Lys	Arg	Gly	Ser	Ile	Ser	Ala	Val	Ile	Gly	His	Ser	Gly
			20				25					30			
Ala	Gly	Lys	Ser	Thr	Leu	Val	Arg	Leu	Ile	Asn	Gly	Leu	Glu	Thr	Pro
		35				40				45					
Thr	Arg	Gly	Arg	Val	Leu	Val	Asp	Gly	Thr	Asp	Val	Ser	Gln	Leu	Ser
	50				55				60						
Asp	Lys	Ala	Met	Arg	Pro	Leu	Arg	Ala	Asp	Ile	Gly	Met	Ile	Phe	Gln

65					70					75				80
Gln	Phe	Asn	Leu	Phe	Gly	Ser	Arg	Thr	Ile	Tyr	Asp	Asn	Val	Ala Tyr
				85					90					95
Pro	Leu	Lys	Leu	Ala	His	Trp	Lys	Lys	Ala	Asp	Glu	Lys	Lys	Arg Val
			100					105					110	
Thr	Glu	Leu	Leu	Ser	Phe	Val	Gly	Leu	Thr	Ser	Lys	Ala	Trp	Asp His
			115				120					125		
Pro	Asp	Gln	Leu	Ser	Gly	Gly	Gln	Lys	Gln	Arg	Val	Gly	Ile	Ala Arg
			130			135					140			
Ala	Leu	Ala	Thr	Lys	Pro	Ser	Ile	Leu	Leu	Ala	Asp	Glu	Ser	Thr Ser
145					150					155				160
Ala	Leu	Asp	Pro	Glu	Thr	Thr	Ala	Asp	Val	Leu	Ser	Leu	Leu	Lys Arg
			165					170					175	
Val	Asn	Ala	Glu	Leu	Gly	Val	Thr	Val	Val	Val	Ile	Thr	His	Glu Met
			180				185						190	
Glu	Val	Val	Arg	Ser	Ile	Ala	Gln	Gln	Val	Ser	Val	Leu	Ala	Ala Gly
			195				200					205		
His	Leu	Val	Glu	Ser	Gly	Ser	Ala	Arg	Gln	Val	Phe	Ala	His	Pro Gln
			210			215					220			
Ser	Glu	Thr	Thr	Gln	Arg	Phe	Leu	Ala	Thr	Ile	Ile	Gly	Gln	His Pro
225					230					235				240
Ser	Gly	Glu	Glu	Gln	Ala	Arg	Leu	Gln	Ser	Glu	Asn	Pro	Asp	Ala Arg
				245				250					255	
Leu	Val	Asp	Val	Ser	Ser	Val	Ala	Ser	His	Ser	Phe	Gly	Asp	Ala
			260					265					270	

<210> 217  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 217  
 nnacgcgtcg cgatgaaaga ggcgctgaaa ggtgccatcc agattccaac agtgactttt  
 60  
 agctctgaga agtccaatac tacagccctg gctgagttcg gaaaatacat tcataaagtc  
 120  
 tttcctacag tggtcagcac cagctttatc cagcatgaag tcgtggaaga gtatagccac  
 180  
 ctgttcacta tccaaggctc ggaccccagc ttgcagccct acctgctgat ggctcacttt  
 240  
 gatgtggtgc ctgccctga agaaggctgg gaggtgcccc cattctctgg gttggagcgt  
 300  
 gatggcgtca tctatggttg gggcacactg gacgacaaga actctgtgat ggcattactg  
 360  
 caggccttgg agctcctgct gatcaggaag tacatcccc gaagatcttt cttcattttt  
 420  
 ctgggccatg atgaggagtc atcagggaca ggggctcaga ggatctcagc cctgctacag  
 480  
 tcaaggggcg tccagctagc  
 500

<210> 218  
 <211> 166  
 <212> PRT

<213> Homo sapiens

<400> 218

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Xaa Arg Val Ala Met Lys Glu Ala Leu Lys Gly Ala Ile Gln Ile Pro
 1           5           10           15
Thr Val Thr Phe Ser Ser Glu Lys Ser Asn Thr Thr Ala Leu Ala Glu
 20           25           30
Phe Gly Lys Tyr Ile His Lys Val Phe Pro Thr Val Val Ser Thr Ser
 35           40           45
Phe Ile Gln His Glu Val Val Glu Glu Tyr Ser His Leu Phe Thr Ile
 50           55           60
Gln Gly Ser Asp Pro Ser Leu Gln Pro Tyr Leu Leu Met Ala His Phe
 65           70           75           80
Asp Val Val Pro Ala Pro Glu Glu Gly Trp Glu Val Pro Pro Phe Ser
 85           90           95
Gly Leu Glu Arg Asp Gly Val Ile Tyr Gly Trp Gly Thr Leu Asp Asp
100           105           110
Lys Asn Ser Val Met Ala Leu Leu Gln Ala Leu Glu Leu Leu Leu Ile
115           120           125
Arg Lys Tyr Ile Pro Arg Arg Ser Phe Phe Ile Ser Leu Gly His Asp
130           135           140
Glu Glu Ser Ser Gly Thr Gly Ala Gln Arg Ile Ser Ala Leu Leu Gln
145           150           155           160
Ser Arg Gly Val Gln Leu
165

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<210> 219

<211> 361

<212> DNA

<213> Homo sapiens

<400> 219

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acgcgttgaa acgggtatat tggggatgac gccgctgtgc aatatgcgca aggccataca
60
caaggtccgc acgctcccat gtccctcggt ttcgacagtt cttttgcgcc gcattatggc
120
gaagccgtcg agattgcgcc tgatatcaag cgcacacgg tcaacaaccc cagccccttc
180
acttttttcg gcaccaacag ttatctgata ggccgcgata cgctggcatt gatcgatccc
240
ggtccgcttg acgaggccca tcacgcggcg ctgctgcgtg ccattgccgg ccggccggtc
300
agccatatct ttgtcagcca cacacaccgg gaccactcgc cagtcgcgac ggttttgaaa
360
g
361

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<210> 220

<211> 102

<212> PRT

<213> Homo sapiens

<400> 220

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Met Ala Asp Arg Pro Ala Gly Asn Gly Thr Gln Gln Arg Arg Val Met

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1		5		10		15									
Gly	Leu	Val	Lys	Arg	Thr	Gly	Ile	Asp	Gln	Cys	Gln	Arg	Ile	Ala	Ala
		20						25					30		
Asp	Gln	Ile	Thr	Val	Gly	Ala	Glu	Lys	Ser	Glu	Gly	Ala	Gly	Val	Val
		35						40				45			
Asp	Arg	Asp	Ala	Leu	Asp	Ile	Arg	Arg	Asn	Leu	Asp	Gly	Phe	Ala	Ile
		50				55					60				
Met	Arg	Arg	Lys	Arg	Thr	Val	Glu	Asn	Glu	Gly	His	Gly	Ser	Val	Arg
65					70					75				80	
Thr	Leu	Cys	Met	Ala	Leu	Arg	Ile	Leu	His	Ser	Gly	Val	Ile	Pro	Asn
				85				90						95	
Ile	Pro	Val	Ser	Thr	Arg										
				100											

<210> 221  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 221  
 agatctctgt gtcgtcggct gcaaagagga tgagcccaga tgcatatcag gggctccctc  
 60  
 ccacatccca cctgctcggg cagcccacgg cagcccaca ctgctgcagc acacctcgct  
 120  
 gcagctctgg ttcctcctca gaaatatccc tgccaccctg ctaagccttg gccaacactg  
 180  
 caccctgtcc caatgcggct ccagtgaacca cacccccagg gcataccctc ctacagagca  
 240  
 ttccccaaaa aggctagagt agacaccagc ctgctccgta gggggcctcc accccattct  
 300  
 ccaaggcctc caccagggga cgcttggtga accagcatcc aggcctggcc cacctccctg  
 360  
 ctcaagtcc atgttctgtg acaagggtgg caactgggat t  
 401

<210> 222  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 222
Met Asp Ser Glu Gln Gly Gly Gly Pro Gly Leu Asp Ala Gly Ser Pro
1 5 10 15
Gly Val Pro Gly Trp Arg Pro Trp Arg Met Gly Trp Arg Pro Pro Thr
20 25 30
Glu Gln Ala Gly Val Tyr Ser Ser Leu Phe Trp Glu Cys Ser Val Gly
35 40 45
Gly Tyr Ala Leu Gly Val Trp Ser Leu Glu Pro His Trp Asp Arg Val
50 55 60
Gln Cys Trp Pro Arg Leu Ser Arg Val Ala Gly Ile Phe Leu Arg Arg
65 70 75 80
Asn Gln Ser Cys Ser Glu Val Cys Cys Ser Ser Val Gly Leu Pro Trp
85 90 95
Ala Ala Arg Ala Gly Gly Met Trp Glu Gly Ala Pro Asp Met His Leu

100 105 110  
 Gly Ser Ser Ser Leu Gln Pro Thr Thr Gln Arg Ser  
 115 120

<210> 223  
 <211> 331  
 <212> DNA  
 <213> Homo sapiens

<400> 223  
 tcatgaaatc tgtgggcagt gaccaggag ggtatgggca ggcccaacca ggttgggtgtg  
 60  
 cccttgaagc cccacagacc tgccagggca gcagggcagt tgggagccgg agaacctgag  
 120  
 aaccaagcca ggctgcatgc aggaggctgg cacgtgaacg ctgcagggtgt tgccggcagc  
 180  
 cgtgggtgctt ggagatagt gttcgacccc cnaggacctt cttgctgggc agccagtc  
 240  
 aaaagctggt cccgcttaag ccacccccac cgccttggcc acacctggca catgggtgaa  
 300  
 gcaagggcat ttcccggggc ttctgttcc c  
 331

<210> 224  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 224  
 Met Pro Leu Leu His Pro Cys Ala Arg Cys Gly Gln Gly Gly Gly Gly  
 1 5 10 15  
 Gly Leu Ser Gly Asn Ser Phe Trp Thr Gly Leu Pro Ser Lys Lys Val  
 20 25 30  
 Leu Gly Gly Arg Thr Leu Ser Ala Arg His His Gly Cys Arg Gln His  
 35 40 45  
 Leu Gln Arg Ser Arg Ala Ser Leu Leu His Ala Ala Trp Leu Gly Ser  
 50 55 60  
 Gln Val Leu Arg Leu Pro Thr Ala Leu Leu Pro Trp Gln Val Cys Gly  
 65 70 75 80  
 Ala Ser Arg Ala His Gln Pro Gly Trp Ala Cys Pro Tyr Pro Pro Gly  
 85 90 95  
 Ser Leu Pro Thr Asp Phe Met  
 100

<210> 225  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 225  
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 cagaatgacc ctcattccct cctgcacaga cggtagacgc agtaactcct acaaacacca  
 120

ccagactgat cttcaagagc agaggaactc ccaatcacga ttccaccccc gccgggctct  
 180  
 caaatcctcc agggctgcct gctatggggg agggaggcac actttgcttg gctctcaagg  
 240  
 cctcagccag ccgggtccaa accaactccc agcctggcct caccatccca ccgccaaacc  
 300  
 tttgctcaca ctggccctc ttcctggaac atgggcctn  
 339

<210> 226

<211> 91

<212> PRT

<213> Homo sapiens

<400> 226

Met	Thr	Leu	Ile	Pro	Ser	Cys	Thr	Asp	Gly	Asp	Ser	Ser	Asn	Ser	Tyr
1				5					10					15	
Lys	His	His	Gln	Thr	Asp	Leu	Gln	Glu	Gln	Arg	Asn	Ser	Gln	Ser	Arg
			20					25					30		
Phe	His	Pro	Arg	Arg	Ala	Leu	Lys	Ser	Ser	Arg	Ala	Ala	Cys	Tyr	Gly
			35				40					45			
Gly	Gly	Arg	His	Thr	Leu	Leu	Gly	Ser	Gln	Gly	Leu	Ser	Gln	Pro	Gly
	50					55					60				
Pro	Asn	Gln	Leu	Pro	Ala	Trp	Pro	His	His	Pro	Thr	Ala	Lys	Pro	Leu
65					70					75					80
Leu	Thr	Leu	Ala	Pro	Leu	Pro	Gly	Thr	Trp	Ala					
				85					90						

<210> 227

<211> 353

<212> DNA

<213> Homo sapiens

<400> 227

gtcgaccctc tcgattgtgg cgaactccat ggctgctgcg ggctgcgta ggctctcgag  
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 tagctcgacg tcgggttcgc gagggctcgc agcgtggcca tgctgcttct tggatggttc  
 120  
 gggcaactcc tcgggggatt cgagcagttc ttggcgcacc tgctctggcg tcatcccgga  
 180  
 ggccaggccg acaagtgctg cctcctgcc cccgctgagc gacgctgcca tgttgagtac  
 240  
 ggcgtcttca ctggtcaggg cgagcgcggt atcgaccagg ttggcgtcca ggccgagaga  
 300  
 cagcatgtct gctcagtcgc ggtgatgact ggagtggcgg tctcctgcac ggg  
 353

<210> 228

<211> 102

<212> PRT

<213> Homo sapiens

<400> 228

Met Leu Ser Leu Gly Leu Asp Ala Asn Leu Val Asp Thr Ala Leu Ala

1	5	10	15
Leu Thr Ser Glu Asp Ala Val Leu Asn Met Ala Ala Ser Leu Ser Gly			
20	25	30	
Trp Gln Glu Ala Ala Leu Val Gly Leu Ala Ser Gly Met Thr Pro Glu			
35	40	45	
Gln Val Arg Gln Glu Leu Leu Glu Ser Pro Glu Glu Leu Pro Glu Pro			
50	55	60	
Ser Lys Lys Gln His Gly His Ala Ala Ser Pro Arg Glu Pro Asp Val			
65	70	75	80
Glu Leu Leu Glu Ser Leu Arg Arg Pro Ala Ala Ala Met Glu Phe Ala			
85	90	95	
Thr Ile Glu Gly Val Asp			
100			

<210> 229  
 <211> 743  
 <212> DNA  
 <213> Homo sapiens

<400> 229  
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 60  
 tcaaagataa cacagggctg gtcaggggct gctggctgct cctgccccag gactggctcc  
 120  
 aggatgggca aggctgcctc cctggtagcc agggggagag gggaagggag caccagggag  
 180  
 tgggccagca ggtgtggcat cggccaggag gagatggagg ccagcagcag ccaagaccag  
 240  
 agtaaagtgt ctgccccagg ggtgctcaca gccaggacc gggtagttgg aaagccagcc  
 300  
 cagcttggca ctacagggag ccaggaggca gatgttcagg actgggagtt cagaaagagg  
 360  
 gattccccag gcacttactc cagccgggat gcagaactcc aggaccagga attcggaaag  
 420  
 agagattcac tgggtacctc cagtagtcga gatgtaagcc ttggggactg ggaatttggg  
 480  
 aagagagatt ctctgggtgc ttatgccagc caagatgcca acgagcaggg ccaagatttg  
 540  
 gggaagaggg accaccatgg taggtacagc agccaggatg ccgatgagca ggactgggag  
 600  
 ttccagaaga gagatgtgtc actcggcacc tatggcagcc gggctgcgga gccacaggaa  
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 720  
 cttgacgccc aggacagaag ctt  
 743

<210> 230  
 <211> 247  
 <212> PRT  
 <213> Homo sapiens

<400> 230  
 Xaa Ala Arg Asp Thr Ala Ser Ser Ser Thr Gly Ser Ala Cys Ala Gly

1	5	10	15
Ser Gly Ala Ser	Ser Lys Ile Thr	Gln Gly Trp Ser	Gly Ala Ala Gly
20	25	30	
Cys Ser Cys Pro	Arg Thr Gly Ser	Arg Met Gly Lys	Ala Ala Ser Leu
35	40	45	
Val Ala Arg Gly	Arg Gly Glu Gly	Ser Thr Arg Glu	Trp Ala Ser Arg
50	55	60	
Cys Gly Ile Gly	Gln Glu Glu Met	Glu Ala Ser Ser	Ser Ser Gln Asp Gln
65	70	75	80
Ser Lys Val Ser	Ala Pro Gly Val	Leu Thr Ala Gln	Asp Arg Val Val
85	90	95	
Gly Lys Pro Ala	Gln Leu Gly Thr	Gln Arg Ser Gln	Glu Ala Asp Val
100	105	110	
Gln Asp Trp Glu	Phe Arg Lys Arg	Asp Ser Gln Gly	Thr Tyr Ser Ser
115	120	125	
Arg Asp Ala Glu	Leu Gln Asp Gln	Glu Phe Gly Lys	Arg Asp Ser Leu
130	135	140	
Gly Thr Tyr Ser	Ser Arg Asp Val	Ser Leu Gly Asp	Trp Glu Phe Gly
145	150	155	160
Lys Arg Asp Ser	Leu Gly Ala Tyr	Ala Ser Gln Asp	Ala Asn Glu Gln
165	170	175	
Gly Gln Asp Leu	Gly Lys Arg Asp	His His Gly Arg	Tyr Ser Ser Gln
180	185	190	
Asp Ala Asp Glu	Gln Asp Trp Glu	Phe Gln Lys Arg	Asp Val Ser Leu
195	200	205	
Gly Thr Tyr Gly	Ser Arg Ala Ala	Glu Pro Gln Glu	Gln Glu Phe Gly
210	215	220	
Lys Ser Ala Trp	Ile Arg Asp Tyr	Ser Ser Gly Gly	Ser Ser Arg Thr
225	230	235	240
Leu Asp Ala Gln	Asp Arg Ser		
245			

<210> 231  
 <211> 431  
 <212> DNA  
 <213> Homo sapiens

<400> 231  
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 120  
 ccaccaggac gccactcgcc gectgctgcc agtcccagac caggctccttc gtcttggtca  
 180  
 tctcgctgga ggccaggagg atgatgggtgc tggctgtgtc cttgtccagc tcaactgggc  
 240  
 gactgctcag gaccctctcc atggcctca ggaccgctgc tcggtatggg tgtgccagct  
 300  
 tgtcatgctg ccgcagatac tcctcgcagg cacggagcgt ctccaccctg ctggacgcc  
 360  
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 420  
 aggtgcggcc g  
 431



<210> 232  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 232  
 Met Ala Ser Ser Arg Val Glu Thr Leu Arg Ala Cys Glu Glu Tyr Leu  
 1 5 10 15  
 Arg Gln His Asp Lys Leu Ala His Pro Tyr Arg Ala Ala Val Leu Arg  
 20 25 30  
 Ala Met Glu Arg Val Leu Ser Ser Arg Ala Ser Glu Leu Asp Lys Asp  
 35 40 45  
 Thr Ala Ser Thr Ile Ile Leu Leu Ala Ser Ser Glu Met Thr Lys Thr  
 50 55 60  
 Lys Asp Leu Val Trp Asp Trp Gln Gln Ala Ala Ser Gly Val Leu Val  
 65 70 75 80  
 Ala Val Gly Arg Gln Phe Ile Ser Lys Val Met Glu Glu Leu Leu Arg  
 85 90 95  
 Arg Leu His Pro Gly Thr Leu Pro His Cys Ala Val Leu His Thr Leu  
 100 105 110  
 Ala Ser Leu Ser Val Ala Asn Ala  
 115 120

<210> 233  
 <211> 606  
 <212> DNA  
 <213> Homo sapiens

<400> 233  
 acgcgttcag ggatgccaga aatctaactg ggtaataaaa agctgggaga acattccaga  
 60  
 aagggtgggca cccttagcat tcccaaaaag caccagccct cctcatcctt cccagcttct  
 120  
 gtgctggaat gcacccccat cggaaggct cgaaaactca ggacacatta ggatcacctg  
 180  
 gaaagcattt gtcaaaacgc atctccctgc gggtcagggt ccaagttaaa atcaaacttc  
 240  
 aggtgatgct gactcagggt gctccagaaa cacctgggga agcagcactt tggaggctgc  
 300  
 ctctcacatc caccacacag caagtgggca gggagctagg taaatctect tcccagttga  
 360  
 gaaggggctc ggagcaggca cagagaagag atacccttag aatgcaagtt gttcagctgc  
 420  
 gaaagtccag cctgcaggct tcctgggcaa gctagtgggc tgaagtatgc cacagcaaca  
 480  
 ggcttctaga gccggctgcc cagctcctac tetgctctg ccactcactg actgtgtggt  
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 cttgagcagg tcacctgtct gacttggtga gagctgacag gcatcacctg ttagaggctt  
 600  
 acgcgt  
 606

<210> 234

<211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 234  
 Met His Pro His Arg Lys Gly Ser Lys Thr Gln Asp Thr Leu Gly Ser  
 1 5 10 15  
 Pro Gly Lys His Leu Ser Lys Arg Ile Ser Leu Arg Val Arg Val Gln  
 20 25 30  
 Val Lys Ile Lys Leu Gln Val Met Leu Thr Gln Val Ala Pro Glu Thr  
 35 40 45  
 Pro Gly Glu Ala Ala Leu Trp Arg Leu Pro Leu Thr Ser Thr Pro Gln  
 50 55 60  
 Gln Val Gly Arg Glu Leu Gly Lys Ser Pro Ser Gln Leu Arg Arg Gly  
 65 70 75 80  
 Ser Glu Gln Ala Gln Arg Arg Asp Thr Leu Arg Met Gln Val Val Gln  
 85 90 95  
 Leu Arg Lys Ser Ser Leu Gln Ala Ser Trp Ala Ser  
 100 105

<210> 235  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 235  
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 60  
 atagcaaaca cttaaaacag cagcagtaca gagctgaaaa ccagattctt ttgaaagaga  
 120  
 ttgaaagtct agaggaagaa cgacttgatc tgaaaaaaaa aattcgccaa atggctcaag  
 180  
 aaagaggaaa aagaagggca acttcaggat taaccactgg ggacctgaac ctaactgaaa  
 240  
 acatttctca aggagataga ataagtgaag gaaaattgga tttattgagc ctcaaaaata  
 300  
 tgagtgaagc acaatcaaag aatgaatt  
 328

<210> 236  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 236  
 Met Ile Asp Leu Thr Glu Phe Arg Asn Ser Lys His Leu Lys Gln Gln  
 1 5 10 15  
 Gln Tyr Arg Ala Glu Asn Gln Ile Leu Leu Lys Glu Ile Glu Ser Leu  
 20 25 30  
 Glu Glu Glu Arg Leu Asp Leu Lys Lys Lys Ile Arg Gln Met Ala Gln  
 35 40 45  
 Glu Arg Gly Lys Arg Arg Ala Thr Ser Gly Leu Thr Thr Gly Asp Leu  
 50 55 60  
 Asn Leu Thr Glu Asn Ile Ser Gln Gly Asp Arg Ile Ser Glu Arg Lys

65		70		75		80									
Leu	Asp	Leu	Leu	Ser	Leu	Lys	Asn	Met	Ser	Glu	Ala	Gln	Ser	Lys	Asn
				85				90						95	
Glu															

&lt;210&gt; 237

&lt;211&gt; 2059

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 237

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gagcagcaag ccggcgtcca tagctacggc ccatacggtc atgtctgcca tggctccggt
120
gatgtcagac tgcacatgaa atcgggttacg gtaccccagg atcatcgcta ccgagtacac
180
cccgaacagc acccgctggg cgcgatcag cgtgaggag tgccccacca gtggcacttt
240
tcttagatag cggaacccat ccaccacatc cccagtcacc gttctcatcg tccgggaacg
300
atccaccagt ggcggcccaa gctcccgacg tgaaaactgc agcccctagg cgaccgagac
360
tgcaagagg gctgcggaga tgcagaaaat gatcgtgtcg gcgtggtgca caggaatatg
420
gcgtccggca atcatgcgca ctgctgcagc aacaaccgca ccgatcatga gccctagcgg
480
ccaatcggtg gcatgattga cgatgccgtc aggtagtcgc gcttgtcgat ggtgtattcc
540
aaccagcga ccaaggcggg gagcaaaaac cggttcaggc tcatcgcgat gagcaaccca
600
atgagcaagg ccagggtggga gggcttatcg cgcgcaccac cccagaccaa gatccccagc
660
ccgacccagg tgacggcacg cattcatctg cgtattgtcc cgactacacc gtgagggcgc
720
tctctgatct gcagctcatc aaggttacgc gactgcagta cctcaatgca ctcctggcta
780
cccagacca gaacctgcca cagtcccctg agaacaccga cctgcagggt attccaggca
840
gccagaccag gtccttggtt gagaagacca ccacagcggc agctttccca gtagcccttt
900
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960
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1020
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1080
agatgagcac gtggggagct ggagtgagct gagcagaagt tttgtgccc cctgccccca
1140
tcccctccag gccacgtttt agatggccct tgtagttgcg ggtcctgggt gtccctcagaa
1200
ctagacatca atgcctggat ccttcagccg gccctgccct cctttaggag acaggagtca
1260

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ccagggcaca gccctccagg cccgcctcag gaaggaatga aaggaatgcc atcatctcta  
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 gttcccaggg cccagccttc cccttctccc ccggggcagg gacagtgcgg catattcaga  
 1380  
 ttcagacctc tttgggctga gccaccttgt gagtgcagtt actgcctttg tgtggccgtg  
 1440  
 acctctattt gtttgctttt aatttgccaa cctatcgctg ctggcagcac tttttgagca  
 1500  
 agccgagagc acccattttg gctggggatt cagatcgatg gccttgtcca tgttgcctt  
 1560  
 tctggcttcc ctgatggtgt catgtttcag cgcattgcgc ccagcctttc ccatgtgcca  
 1620  
 aaccagaagc tccactgccc gtaggctgtc cctgtagccc tgctccctcc ctggaggctg  
 1680  
 ctcttctgat tctgagagct ggcctagtgg tgctgagggc ccctttctgc ttctctgccc  
 1740  
 acctgctgag ttgccactcg cagtgttgtc agttccctg ttttgagaag aggtcatgcc  
 1800  
 tgggaggaag ggatcgtcat gctgcacga atcctctctc cgccgtgtgg cccccaggag  
 1860  
 agtagctgcc tgttgcaact gctccacacc tccccacagc ctccctgcag gtgctgtgtg  
 1920  
 gccgtgatgt gcagagagca gtgagggagg gttcatgaac cagggtggatc ctctttaaaa  
 1980  
 aaaaaaaaaag tttttgttat atctctaaaa tcccatagct aggaacagaa aaaaaggaaa  
 2040  
 agacttgaaa tgttctaga  
 2059

<210> 238  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 238  
 Ala Glu Gln Lys Phe Cys Ala Arg Leu Pro Pro Ser Pro Pro Gly His  
 1 5 10 15  
 Val Leu Asp Gly Pro Cys Ser Cys Gly Ser Trp Val Ser Ser Glu Leu  
 20 25 30  
 Asp Ile Asn Ala Trp Ile Leu Gln Pro Ala Leu Pro Ser Phe Arg Arg  
 35 40 45  
 Gln Glu Ser Pro Gly His Ser Pro Pro Gly Pro Pro Gln Glu Gly Met  
 50 55 60  
 Lys Gly Met Pro Ser Ser Leu Val Pro Arg Ala Gln Pro Ser Pro Ser  
 65 70 75 80  
 Pro Pro Gly Gln Gly Gln Cys Gly Ile Phe Arg Phe Arg Pro Leu Trp  
 85 90 95  
 Ala Glu Pro Pro Cys Glu Cys Ser Tyr Cys Leu Cys Val Ala Val Thr  
 100 105 110  
 Ser Ile Cys Leu Leu Leu Ile Cys Gln Pro Ile Ala Ala Gly Ser Thr  
 115 120 125  
 Phe

<210> 239  
 <211> 388  
 <212> DNA  
 <213> Homo sapiens

<400> 239  
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 cctcgaatta atgagatggg ggactggatg agtcaagttc tcgtcgttgc ggcggctgtc  
 120  
 ggtcagctgc cctcctcca cttctgcttc tcggcggttac cccataccgt attggccgcg  
 180  
 tgttcacctt tgaatgcagc catgtcgtcg tctccgtatc gaaatgatgt gccatcgaag  
 240  
 atgccgacct cagcatcgcc atctgcagtg atgagtgcgt atcgcgccac acgaaacgcc  
 300  
 cagcgcaacc gtgtcctcgc acgatacgaa gtgcttgggt atctcagctc tggtagctat  
 360  
 ggtcgtgtat ataaagcaaa ggaacttn  
 388

<210> 240  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 240  
 Met Val Asp Trp Met Ser Gln Val Leu Val Val Ala Ala Ala Val Gly  
 1 5 10 15  
 Gln Leu Pro Leu Leu His Phe Cys Phe Ser Ala Leu Pro His Thr Val  
 20 25 30  
 Leu Ala Ala Cys Ser Pro Leu Asn Ala Ala Met Ser Ser Ser Pro Tyr  
 35 40 45  
 Arg Asn Asp Val Pro Ser Lys Met Pro Thr Ser Ala Ser Ala Ser Ala  
 50 55 60  
 Val Met Ser Ala Tyr Arg Ala Thr Arg Asn Ala Gln Arg Asn Arg Val  
 65 70 75 80  
 Leu Ala Arg Tyr Glu Val Leu Gly Tyr Leu Ser Ser Gly Thr Tyr Gly  
 85 90 95  
 Arg Val Tyr Lys Ala Lys Glu Leu  
 100

<210> 241  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 241  
 ncggggggcc gagttgaaag ctgccggcac actggctgtg ctgcttgctt cacttctcgg  
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 gatgctgctt ccaggggcgg cctgggggaa acatcggcct tcccaggcac ccttagcccg  
 120  
 tcccatctgg gggcccttag cacagtcctt gggacccac atgctgcctt tcaggctgat  
 180

gtgggcaaac tcggcagccc agcctactcc cgggccatgg gccaccatct cagcttcctt  
 240  
 ggggctaagc cgtgtgctct gaatcaaaag cagtagtggc atcggcggca ctggcgccat  
 300  
 gggaaacggg ttgacttgca caaccagcac  
 330

<210> 242  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 242  
 Met Ala Pro Val Pro Pro Met Pro Leu Leu Leu Leu Ile Gln Ser Thr  
 1 5 10 15  
 Arg Leu Ser Pro Arg Glu Ala Glu Met Val Ala His Gly Pro Gly Val  
 20 25 30  
 Gly Trp Ala Ala Glu Phe Ala His Ile Ser Leu Lys Gly Ser Met Trp  
 35 40 45  
 Gly Pro Arg Asp Cys Ala Lys Gly Pro Gln Met Gly Arg Ala Lys Gly  
 50 55 60  
 Ala Trp Glu Gly Arg Cys Phe Pro Gln Ala Arg Pro Gly Ser Ser Ile  
 65 70 75 80  
 Pro Arg Ser Glu Ala Ser Ser Thr Ala Ser Val Pro Ala Ala Phe Asn  
 85 90 95  
 Ser Ala Pro Arg  
 100

<210> 243  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 243  
 nnaccttctc tccgcgttat taccaaagat gctatgcacg taactgcgga ggaaattctt  
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 cacacaggcc accccgcccc cactgcgctc gtcgctaatac ttccctataa cgttgcggtta  
 120  
 cccgtactgc tacacatgct agatattctc ccctccttgc ggactacagt ggtgatgggtg  
 180  
 caggcagaag tagccgateg attggctgcc acaccaggca gccgcattta cgggtgtcccc  
 240  
 agcgtcaaag tcaactttta cgggactgtc tcgcgtgcgg gagcaattgg acgcaatgtc  
 300  
 ttctggccgg ctcccaatgt tgattctggn  
 330

<210> 244  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 244  
 Xaa Pro Ser Leu Arg Val Ile Thr Lys Asp Ala Met His Val Thr Ala

1				5					10					15	
Glu	Glu	Ile	Leu	His	Thr	Gly	His	Pro	Ala	Pro	Thr	Ala	Leu	Val	Ala
			20					25					30		
Asn	Leu	Pro	Tyr	Asn	Val	Ala	Val	Pro	Val	Leu	Leu	His	Met	Leu	Asp
		35					40					45			
Ile	Leu	Pro	Ser	Leu	Arg	Thr	Thr	Val	Val	Met	Val	Gln	Ala	Glu	Val
	50					55					60				
Ala	Asp	Arg	Leu	Ala	Ala	Thr	Pro	Gly	Ser	Arg	Ile	Tyr	Gly	Val	Pro
65					70					75				80	
Ser	Val	Lys	Val	Asn	Phe	Tyr	Gly	Thr	Val	Ser	Arg	Ala	Gly	Ala	Ile
				85					90				95		
Gly	Arg	Asn	Val	Phe	Trp	Pro	Ala	Pro	Asn	Val	Asp	Ser	Gly		
			100					105					110		

&lt;210&gt; 245

&lt;211&gt; 355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 245

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60  
aacaatgtcg agcccgaatg gatgatggta gccacaccca tctcggaaag gtggaatgca  
120  
gcgtgttgca gaaacagaag ttgaccgtcg gaggtaggcg gcattcgctt cggatcgaag  
180  
cgtcccgagg catccatctc gagttgacga cgaaaatctt tccagtcac gccgtagggg  
240  
ganttggaac ccacagcatc gaatttgtcc agaaggaagt ggtcgttggt gagggatttg  
300  
ccccattcaa tacgcgcac ttcccgaag cgcgccctcta ttgcggccaa cgcgt  
355

&lt;210&gt; 246

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 246

Met	Arg	Val	Leu	Asn	Gly	Ala	Ile	Pro	Ser	Pro	Thr	Thr	Thr	Ser	Phe
1				5				10						15	
Trp	Thr	Asn	Ser	Met	Leu	Trp	Leu	Pro	Xaa	Pro	Pro	Thr	Ala	Trp	Thr
			20					25					30		
Gly	Lys	Ile	Phe	Val	Val	Asn	Ser	Arg	Trp	Met	Pro	Arg	Asp	Ala	Ser
		35				40					45				
Ile	Arg	Ser	Glu	Cys	Arg	Leu	Pro	Pro	Thr	Val	Asn	Phe	Cys	Phe	Cys
	50					55				60					
Asn	Thr	Leu	His	Ser	Thr	Phe	Pro	Arg	Trp	Val	Trp	Leu	Pro	Ser	Ser
65					70					75				80	
Ile	Arg	Ala	Arg	His	Cys	Phe	Gln	Val	Thr	Pro	Ala	Glu	Val	Asn	Pro
				85				90					95		
Lys	Leu	Gly	Gly	Gly											
			100												

<210> 247  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 247  
 atggccgcga atgggcaccg tgtcatggtc gtctctcccc gctacgacca gtacaaggac  
 60  
 gcctgggaca ccagcgtcgt gtccgagatc aagatgggag acaggtacga gacggtcagg  
 120  
 ttcttccact gctacaagcg cggagtggac cgcggtgttcg ttgaccaccc actgttcctg  
 180  
 gagagggttt ggggaaagac cgaggagaag atctacgggc ctgacgctgg aacggactac  
 240  
 agggacaacc agctgcggtt cagcctgcta tgccaggcag cacttgaagc tccaaggatc  
 300  
 ctgagcctca acaacaaccc atacttctcc gga  
 333

<210> 248  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 248  
 Met Ala Ala Asn Gly His Arg Val Met Val Val Ser Pro Arg Tyr Asp  
 1 5 10 15  
 Gln Tyr Lys Asp Ala Trp Asp Thr Ser Val Val Ser Glu Ile Lys Met  
 20 25 30  
 Gly Asp Arg Tyr Glu Thr Val Arg Phe Phe His Cys Tyr Lys Arg Gly  
 35 40 45  
 Val Asp Arg Val Phe Val Asp His Pro Leu Phe Leu Glu Arg Val Trp  
 50 55 60  
 Gly Lys Thr Glu Glu Lys Ile Tyr Gly Pro Asp Ala Gly Thr Asp Tyr  
 65 70 75 80  
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 <212> DNA  
 <213> Homo sapiens

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 <211> 927  
 <212> PRT  
 <213> Homo sapiens

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 Phe Val Gln Arg Asn Pro Gly Gly Ser Pro Arg Thr Ala Cys His Leu  
 35 40 45  
 Asn Pro Ser Pro Asp Gly Glu Ala Tyr Thr Leu Ala Ser Arg Pro Pro  
 50 55 60  
 Val Arg Leu Asn Asp Val Met Leu Arg Leu Val Thr Glu Leu Arg Trp  
 65 70 75 80  
 Gln Lys Phe Val Met Phe Tyr Asp Ser Glu Tyr Asp Ile Arg Gly Leu  
 85 90 95  
 Gln Ser Phe Leu Asp Gln Ala Ser Arg Leu Gly Leu Asp Val Ser Leu  
 100 105 110  
 Gln Lys Val Asp Lys Asn Ile Ser His Val Phe Thr Ser Leu Phe Thr  
 115 120 125  
 Thr Met Lys Thr Glu Glu Leu Asn Arg Tyr Arg Asp Thr Leu Arg Arg  
 130 135 140  
 Ala Ile Leu Leu Leu Ser Pro Gln Gly Ala His Ser Phe Ile Asn Glu  
 145 150 155 160  
 Ala Val Glu Thr Asn Leu Ala Ser Lys Asp Ser His Trp Val Phe Val  
 165 170 175  
 Asn Glu Glu Ile Ser Asp Pro Glu Ile Leu Asp Leu Val His Ser Ala  
 180 185 190  
 Leu Gly Arg Met Thr Val Val Arg Gln Ile Phe Pro Ser Ala Lys Asp  
 195 200 205  
 Asn Gln Lys Cys Thr Arg Asn Asn His Arg Ile Ser Ser Leu Leu Cys  
 210 215 220  
 Asp Pro Gln Glu Gly Tyr Leu Gln Met Leu Gln Ile Ser Asn Leu Tyr  
 225 230 235 240  
 Leu Tyr Asp Ser Val Leu Met Leu Ala Asn Ala Phe His Arg Lys Leu  
 245 250 255  
 Glu Asp Arg Lys Trp His Ser Met Ala Ser Leu Asn Cys Ile Arg Lys

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Lys	Gly	His	Ile	Thr	Gly	Leu	Thr	Gly	Val	Met	Glu	Phe	Arg	Glu	Asp	
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Ser	Ser	Asn	Pro	Tyr	Val	Gln	Phe	Glu	Ile	Leu	Gly	Thr	Thr	Tyr	Ser	
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Glu	Thr	Phe	Gly	Lys	Asp	Met	Arg	Lys	Leu	Ala	Thr	Trp	Asp	Ser	Glu	
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Gln	Gly	Leu	Thr	Leu	Lys	Val	Val	Thr	Val	Leu	Glu	Glu	Pro	Phe	Val	
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Ser	Ile	Asp	Val	Leu	Asp	Ala	Leu	Ala	Lys	Ala	Leu	Gly	Phe	Lys	Tyr	
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Glu	Ile	Tyr	Gln	Ala	Pro	Asp	Gly	Arg	Tyr	Gly	His	Gln	Leu	His	Asn	
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Thr	Ser	Trp	Asn	Gly	Met	Ile	Gly	Glu	Leu	Ile	Ser	Lys	Arg	Ala	Asp	
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Leu	Ala	Ile	Ser	Ala	Ile	Thr	Ile	Thr	Pro	Glu	Arg	Glu	Ser	Val	Val	
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Asp	Phe	Ser	Lys	Arg	Tyr	Met	Asp	Tyr	Ser	Val	Gly	Ile	Leu	Ile	Lys	
	450					455					460					
Lys	Pro	Glu	Glu	Lys	Ile	Ser	Ile	Phe	Ser	Leu	Phe	Ala	Pro	Phe	Asp	
465					470					475					480	
Phe	Ala	Val	Trp	Ala	Cys	Ile	Ala	Ala	Ala	Ile	Pro	Val	Val	Gly	Val	
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Leu	Ile	Phe	Val	Leu	Asn	Arg	Ile	Gln	Ala	Val	Arg	Ala	Gln	Ser	Ala	
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Ala	Gln	Pro	Arg	Pro	Ser	Ala	Ser	Ala	Thr	Leu	His	Ser	Ala	Ile	Trp	
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Ile	Val	Tyr	Gly	Ala	Phe	Val	Gln	Gln	Gly	Gly	Glu	Ser	Ser	Val	Asn	
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				565					570					575		
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690		695		700
Arg Ile Leu Glu Leu Gln Asp Thr Gly Asp Leu Asp Val Leu Lys Gln				
705		710		715
Lys Trp Trp Pro His Met Gly Arg Cys Asp Leu Thr Ser His Ala Ser				
	725		730	735
Ala Gln Ala Asp Gly Lys Ser Leu Lys Leu His Ser Phe Ala Gly Val				
	740		745	750
Phe Cys Ile Leu Ala Ile Gly Leu Leu Leu Ala Cys Leu Val Ala Ala				
	755		760	765
Leu Glu Leu Trp Trp Asn Ser Asn Arg Cys His Gln Glu Thr Pro Lys				
	770		775	780
Glu Asp Lys Glu Val Asn Leu Glu Gln Val His Arg Arg Met Asn Ser				
785		790		795
Leu Met Asp Glu Asp Ile Ala His Lys Gln Ile Ser Pro Ala Ser Ile				
	805		810	815
Glu Leu Ser Ala Leu Glu Met Gly Gly Leu Ala Pro Thr Gln Thr Leu				
	820		825	830
Glu Pro Thr Arg Glu Tyr Gln Asn Thr Gln Leu Ser Val Ser Thr Phe				
	835		840	845
Leu Pro Glu Gln Ser Ser His Gly Thr Ser Arg Thr Leu Ser Ser Gly				
	850		855	860
Pro Ser Ser Asn Leu Pro Leu Pro Leu Ser Ser Ser Ala Thr Met Pro				
865		870		875
Ser Met Gln Cys Lys His Arg Ser Pro Asn Gly Gly Leu Phe Arg Gln				
	885		890	895
Ser Pro Val Lys Thr Pro Ile Pro Met Ser Phe Gln Pro Val Pro Gly				
	900		905	910
Gly Val Leu Pro Glu Ala Leu Asp Thr Ser His Gly Thr Ser Ile				
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&lt;210&gt; 251

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 251

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gagtaccacc attcgggtgac cctgctgctg cgggtgcgcg ggaactcacc tctggaacga  
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gaggccctcg aggcccgccg ccgtatcgat gcgaagggttc ccgctctcgt cgagagcgcc  
240  
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291

&lt;210&gt; 252

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 252

Xaa Ile Ser Arg Gly Val Arg Ala Leu Asp Ser Ala Val Glu Thr Glu

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Ser Leu Arg Glu Asp Val Asn Ala Leu Glu Arg Leu Arg Leu Ala Val
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Arg Ala Ser Val Val Ile Leu Ile Glu Tyr His His Ser Val Thr Leu
      35             40             45
Leu Leu Arg Val Arg Gly Asn Ser Pro Leu Glu Arg Glu Ala Leu Glu
      50             55             60
Ala Arg Arg Arg Ile Asp Ala Lys Val Pro Ala Leu Val Glu Ser Ala
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Ile Ala Glu Gly Gly Leu Arg Ser Asp Phe Thr Pro Gly Leu Ile Thr
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Arg

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<210> 253  
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 <212> DNA  
 <213> Homo sapiens

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240
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327

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 <212> PRT  
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      20             25             30
Arg Ser Thr Asn Arg Ala His Met Ser Ala Val Met Ala Gly Thr Leu
      35             40             45
Arg Glu Lys Ala Gly Lys Val Glu Arg Ala Asn Asp Arg Arg Thr Val
      50             55             60
Gly Thr Leu His Glu Arg Asp Glu Lys Leu Ala Ala Gly Arg Ser Leu
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Ala His Asp Phe Gly Arg Arg Leu Asp Ala
      100             105

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 <212> DNA  
 <213> Homo sapiens

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 atcgagctaa ctcgtcgctt aaagaaagac agcacgacag cagaaatccc tgttatttta  
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 372

<210> 256  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 256  
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 Trp Met Met Pro Gly Gly Ser Gly Ile Glu Leu Thr Arg Arg Leu Lys  
 35 40 45  
 Lys Asp Ser Thr Thr Ala Glu Ile Pro Val Ile Leu Leu Thr Ala Lys  
 50 55 60  
 Ser Glu Glu Asp Asn Lys Ile Gln Gly Leu Glu Val Gly Ala Asp Asp  
 65 70 75 80  
 Tyr Ile Thr Lys Pro Phe Ser Pro Arg Glu Leu Val Ala Arg Leu Lys  
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<210> 257  
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 <212> DNA  
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<210> 258

<211> 213

<212> PRT

<213> Homo sapiens

**<400> 258**

[illegible]

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 <211> 252  
 <212> DNA  
 <213> Homo sapiens

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 tgtnggtgtg tatgcatgng tgtgtgcacg tgtgcactgn agtgtggggg gtatgcatgg  
 180  
 tgtgtgcaca tgagcactgt gtggtgtgta tgcattgtn ggtgcacgtg tgcactgtgt  
 240  
 atgcaatggt gt  
 252

<210> 260  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 260  
 Thr Arg Ala Leu Cys Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys  
 1 5 10 15  
 Val Val Cys Met Xaa Trp Cys Val His Val Cys Xaa Cys Val Cys Met  
 20 25 30  
 Val Met Cys Thr Cys Ala Xaa Val Cys Xaa Cys Val Cys Met Xaa Val  
 35 40 45  
 Cys Thr Cys Ala Leu Xaa Cys Gly Val Tyr Ala Trp Cys Val His Met  
 50 55 60  
 Ser Thr Val Trp Cys Val Cys Met Val Xaa Cys Thr Cys Ala Leu Cys  
 65 70 75 80  
 Met Gln Trp Cys

<210> 261  
 <211> 1202  
 <212> DNA  
 <213> Homo sapiens

<400> 261  
 gctagcccgg tcgcgttcgt cgtcgatttg ctggcggcag tcccctcgat cgtcttcggt  
 60  
 ctgtggggcg gcatcgctctt cggatcgctg ggaatcatca acggttacgc gggggcctta  
 120  
 ttcaaagcgc tcggtcggat tccgatcttt tccgaagatc cgtcgtggtc ctcggtact  
 180  
 ggcacggtct accttgccag tctcgtcctg gccatcatga tcctgccaat tatcactgct  
 240  
 gttagccgcy acgtcatgcc ccgaacgccc catgatcaag tcgaggccgc gctcgccttc  
 300  
 ggatcgacgc gctgggaggt catcaagctt gcagtgttcc cccactcgcy gtccggcatc  
 360

atttcgggat ccatgttggg tctaggacgc gccctcggcg agaccctggc tgtcacccctc  
 420  
 atcctgcaga cgatgagccc catggcgctc aaacagaacc tcaacctgtc gatcttcgtc  
 480  
 ggtggtgaga cattcgcgctc gaagattgcc ggtaacttct ccgaggccat tagcgatccc  
 540  
 acctcgctgg gtgccctcgt ggcgtcggcc ctggccctgt tcgtcattac cttcgtggtc  
 600  
 aacgcgactg cccggttgat tgcggcgaag ggggttaagc gatgagcgcc accaccctg  
 660  
 accacatcac ccaccatggc gacaacacgc ccggacagct agatctctcc cgcccgctcg  
 720  
 gtaaacggac tatcaagagc ggctgcgcct caacattcat gatcgtggcc accgtactgg  
 780  
 ctgttatccc actggcctgg ctgctcttcg cggccgtccg gcgcggcatc ggatcactat  
 840  
 tccacgcgtc gtggtggacc cactcgatgg atccctcctt cgacttggcc gagcagggcg  
 900  
 ccatccacgc tatcgtcgga acccttga aa ttggccttat tacatcgatt atctcggtac  
 960  
 cgatcgctct gatgaccgcg atcttcctag tcgagtacgc ccgcggaact aagatcgcca  
 1020  
 aggtcattag cttcgccgtc gacgtgctaa ccggtgtacc ttcaatcgtc ggggccctct  
 1080  
 tcgtcttcgc cgtagtcgtt accaccttcg gtggcaccca atccgcgtgg gcctcctcgt  
 1140  
 tggccctcat gatcctcatg gttccgacgg tgctgcgac aaccgaggaa atgctcaagc  
 1200  
 tt  
 1202

&lt;210&gt; 262

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 262

Ala	Ser	Pro	Val	Ala	Phe	Val	Val	Asp	Leu	Leu	Ala	Ala	Val	Pro	Ser
1				5				10					15		
Ile	Val	Phe	Gly	Leu	Trp	Gly	Gly	Ile	Val	Phe	Gly	Ser	Ser	Gly	Ile
			20					25					30		
Ile	Asn	Gly	Tyr	Ala	Gly	Ala	Leu	Phe	Lys	Ala	Leu	Gly	Trp	Ile	Pro
			35				40						45		
Ile	Phe	Ser	Glu	Asp	Pro	Ser	Trp	Ser	Ser	Ala	Thr	Gly	Thr	Val	Tyr
			50				55					60			
Leu	Ala	Ser	Leu	Val	Leu	Ala	Ile	Met	Ile	Leu	Pro	Ile	Ile	Thr	Ala
						70				75				80	
Val	Ser	Arg	Asp	Val	Met	Pro	Arg	Thr	Pro	His	Asp	Gln	Val	Glu	Ala
						85				90				95	
Ala	Leu	Ala	Leu	Gly	Ser	Thr	Arg	Trp	Glu	Val	Ile	Lys	Leu	Ala	Val
						100				105				110	
Phe	Pro	His	Ser	Arg	Ser	Gly	Ile	Ile	Ser	Gly	Ser	Met	Leu	Gly	Leu
						115								125	
Gly	Arg	Ala	Leu	Gly	Glu	Thr	Leu	Ala	Val	Thr	Leu	Ile	Leu	Gln	Thr

130	135	140
Met Ser Pro Met Ala Leu Lys Gln Asn Leu Asn Leu Ser Ile Phe Val		
145	150	155
Gly Gly Glu Thr Phe Ala Ser Lys Ile Ala Gly Asn Phe Ser Glu Ala		160
	165	170
Ile Ser Asp Pro Thr Ser Leu Gly Ala Leu Val Ala Ser Ala Leu Ala		175
	180	185
Leu Phe Val Ile Thr Phe Val Val Asn Ala Thr Ala Arg Leu Ile Ala		190
	195	200
Ala Lys Gly Val Lys Arg		205
210		

<210> 263  
 <211> 424  
 <212> DNA  
 <213> Homo sapiens

<400> 263  
 acgcgtgagt gctctgcgct ggaaacaacg gtgatagagc ccatccgccg tgaactttcc  
 60  
 gacgtggtgc tcgtgaacaa gctcgaaaag tatgtacgcg aacgtacctc ggaagacggt  
 120  
 gcgcacatgg aagaggatgc ggaccagacg ggcaacgaca tcctcacgac gatcctgctg  
 180  
 tcgaactggg atccactatt ggatatgacg acgcaggatc atgtgctggc catgcaaaag  
 240  
 gcttatatgg cctcgccatt ccgtgccaat ttggacctgg catacccatc ttcgacgcca  
 300  
 caggcccagt ccagccggc gatgccgccg tgggagacag ggacctcagc cagtagcatg  
 360  
 gcggatgctc gtgaatttgc gctgctgaag ctgtacctgc gtagcttgct gcagaagcac  
 420  
 gann  
 424

<210> 264  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 264  
 Met Glu Glu Asp Ala Asp Gln Thr Gly Asn Asp Ile Leu Thr Thr Ile  
 1 5 10 15  
 Leu Leu Ser Asn Trp Asp Pro Leu Leu Asp Met Thr Thr Gln Asp His  
 20 25 30  
 Val Leu Ala Met Gln Lys Ala Tyr Met Ala Ser Pro Phe Arg Ala Asn  
 35 40 45  
 Leu Asp Leu Ala Tyr Pro Ser Ser Thr Pro Gln Ala Gln Ser Gln Pro  
 50 55 60  
 Ala Met Pro Pro Trp Glu Thr Gly Thr Ser Ala Ser Ser Met Ala Asp  
 65 70 75 80  
 Ala Arg Glu Phe Ala Leu Leu Lys Leu Tyr Leu Arg Ser Leu Leu Gln  
 85 90 95  
 Lys His Xaa

<210> 265  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 265  
 ncgtacggcc ctggcggtccg catggacgag ggataccatt ccggcatgac ggtgccgggt  
 60  
 gccttcgact ccctcatcgg caagctcatc atcactgggtg atagccgtga gcaagccctg  
 120  
 gctcgagctg cccgcgccct cgacgaaatc gtcacgacg gcatgccgac ggtcattccc  
 180  
 tttaccagg cggtggttca cgacccggct ttcactgccg ccgacgggtg cttcggcgtc  
 240  
 tttaccgact ggatcgaaac cgagttcgac aacaagatcg agccatacac cgggtctctg  
 300  
 ggcgagtctg ccaattccga gcctcctcgt gaggtcgctg tcgaggtcaa cggtaaacgc  
 360

<210> 266  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 266  
 Xaa Tyr Gly Pro Gly Val Arg Met Asp Glu Gly Tyr His Ser Gly Met  
 1 5 10 15  
 Thr Val Pro Gly Ala Phe Asp Ser Leu Ile Gly Lys Leu Ile Ile Thr  
 20 25 30  
 Gly Asp Ser Arg Glu Gln Ala Leu Ala Arg Ala Ala Arg Ala Leu Asp  
 35 40 45  
 Glu Ile Val Ile Asp Gly Met Pro Thr Val Ile Pro Phe His Gln Ala  
 50 55 60  
 Val Val His Asp Pro Ala Phe Thr Ala Ala Asp Gly Cys Phe Gly Val  
 65 70 75 80  
 Phe Thr Asp Trp Ile Glu Thr Glu Phe Asp Asn Lys Ile Glu Pro Tyr  
 85 90 95  
 Thr Gly Ser Leu Gly Glu Ser Ala Asn Ser Glu Pro Pro Arg Glu Val  
 100 105 110  
 Val Val Glu Val Asn Gly Lys Arg  
 115 120

<210> 267  
 <211> 471  
 <212> DNA  
 <213> Homo sapiens

<400> 267  
 natcctcaac gtgtgttcag ttccacgcga aagatcatgt tcgtcatcgg atcgatgccg  
 60  
 ttaacgcac ctagtcaatc caccgatggc gaccctggca aaaaatacga ggtgacttgg  
 120

ctagatctcg ggcaccttca ccctagtcgg ccgggactcg tcactatcac cacaactgtc  
 180  
 gatgatgacg tcatcacctc ttcccaggta aatgtcggca acctccaccg cggggatgaa  
 240  
 aaacttttcg aagctcgcga ttaccgccag attccgatgc ttgcatcacg tcatggctgg  
 300  
 acagctccat tcattggtga gaccggcgca gcccatgcc a tcgaggatgc gatgggcatt  
 360  
 accatcccaa ctgcggtggc atggatacga accctgctcg ctgagttcag cagaatcacc  
 420  
 tcacacttca catttttgtc atgggtaggc catcactgtg atgatgccgg c  
 471

<210> 268

<211> 157

<212> PRT

<213> Homo sapiens

<400> 268

Xaa	Pro	Gln	Arg	Val	Phe	Ser	Ser	Thr	Arg	Lys	Ile	Met	Phe	Val	Ile
1				5					10					15	
Gly	Ser	Met	Pro	Leu	Thr	His	Pro	Ser	Gln	Ser	Thr	Asp	Gly	Asp	Pro
			20					25					30		
Gly	Lys	Lys	Tyr	Glu	Val	Thr	Trp	Leu	Asp	Leu	Gly	His	Leu	His	Pro
		35					40					45			
Ser	Arg	Pro	Gly	Leu	Val	Thr	Ile	Thr	Thr	Thr	Val	Asp	Asp	Asp	Val
	50					55					60				
Ile	Thr	Ser	Ser	Gln	Val	Asn	Val	Gly	Asn	Leu	His	Arg	Gly	Asp	Glu
65				70					75					80	
Lys	Leu	Phe	Glu	Ala	Arg	Asp	Tyr	Arg	Gln	Ile	Pro	Met	Leu	Ala	Ser
			85						90					95	
Arg	His	Gly	Trp	Thr	Ala	Pro	Phe	Ile	Gly	Glu	Thr	Gly	Ala	Ala	His
			100						105					110	
Ala	Ile	Glu	Asp	Ala	Met	Gly	Ile	Thr	Ile	Pro	Thr	Arg	Val	Ala	Trp
		115					120					125			
Ile	Arg	Thr	Leu	Leu	Ala	Glu	Phe	Ser	Arg	Ile	Thr	Ser	His	Phe	Thr
	130					135					140				
Phe	Leu	Ser	Trp	Val	Gly	His	His	Cys	Asp	Asp	Ala	Gly			
145					150					155					

<210> 269

<211> 387

<212> DNA

<213> Homo sapiens

<400> 269

acgcgtgtcg tgtttccaga aaaaaccaat aaattagagt ttatggtaga agtgattgct  
 60  
 gatatgacgg taatcaatcc atttgatttc tttgtggaaa gctacgcaga agactaccca  
 120  
 tttgcttatg acaaagctct taaaaaagag ttagaacctt atttacaggt ttctgaacct  
 180  
 tgttcgttac tcgacaaatg gctgtctggt gttgatcgtg aaaaaacacc gatcaatgat  
 240

tttctagtcg caataaacag tcgccttgcc ggtgatattg gctatgggtat tcgcttagaa  
 300  
 ccgggcgttc agtcacctga agaaacgctc acattaatga aaggctcttg tcgcgatacc  
 360  
 tcgggggttat tgggttcaaat actacgc  
 387

<210> 270

<211> 129

<212> PRT

<213> Homo sapiens

<400> 270

Thr	Arg	Val	Val	Phe	Pro	Glu	Lys	Thr	Asn	Lys	Leu	Glu	Phe	Met	Val
1				5					10					15	
Glu	Val	Ile	Ala	Asp	Met	Thr	Val	Ile	Asn	Pro	Phe	Asp	Phe	Phe	Val
			20					25					30		
Glu	Ser	Tyr	Ala	Glu	Asp	Tyr	Pro	Phe	Ala	Tyr	Asp	Lys	Ala	Leu	Lys
		35					40					45			
Lys	Glu	Leu	Glu	Pro	Tyr	Leu	Gln	Val	Ser	Glu	Pro	Cys	Ser	Leu	Leu
	50					55					60				
Asp	Lys	Trp	Leu	Ser	Gly	Val	Asp	Arg	Glu	Lys	Thr	Pro	Ile	Asn	Asp
65					70					75				80	
Phe	Leu	Val	Ala	Ile	Asn	Ser	Arg	Leu	Ala	Gly	Asp	Ile	Gly	Tyr	Gly
			85						90					95	
Ile	Arg	Leu	Glu	Pro	Gly	Val	Gln	Ser	Pro	Glu	Glu	Thr	Leu	Thr	Leu
		100						105					110		
Met	Lys	Gly	Ser	Cys	Arg	Asp	Thr	Ser	Gly	Leu	Leu	Val	Gln	Ile	Leu
		115					120					125			

Arg

<210> 271

<211> 443

<212> DNA

<213> Homo sapiens

<400> 271

gccggcacca acggaaaagtc ctctaccgcg cgcattggctg attcgctttt gcgtgccttc  
 60  
 caccgcccag tgggttttggg aaccagccca cacctgcagc gcgttactga gcgcattcggc  
 120  
 attgatggcc agcccattca cccgcgcgat tatgtacgca tctggcacga gattaagcca  
 180  
 tttgtggaat tggtcgatgc cgaatcggac gtgcctatgt ctaagttcga ggtcttcgtg  
 240  
 ggctgtcctt atgctgcggt tggcgacgcc cccggggacg tcgctgtcgt cgaagtcggc  
 300  
 cttggcggac gttgggacgc taccaatgtg gtcaacgcgg atgtctctgt cattaccccg  
 360  
 gtgggcatgg accacacgga ttacctgggg gagacgatca ctgaaatcgc aggcgagaaa  
 420  
 gctggcatta ttaagccacg cgt  
 443

<210> 272  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 272  
 Ala Gly Thr Asn Gly Lys Ser Ser Thr Ala Arg Met Val Asp Ser Leu  
   1                  5                  10                  15  
 Leu Arg Ala Phe His Arg Arg Val Gly Leu Val Thr Ser Pro His Leu  
           20                  25                  30  
 Gln Arg Val Thr Glu Arg Ile Gly Ile Asp Gly Gln Pro Ile His Pro  
       35                  40                  45  
 Arg Asp Tyr Val Arg Ile Trp His Glu Ile Lys Pro Phe Val Glu Met  
       50                  55                  60  
 Val Asp Ala Glu Ser Asp Val Pro Met Ser Lys Phe Glu Val Phe Val  
   65                  70                  75                  80  
 Gly Leu Ser Tyr Ala Ala Phe Ala Asp Ala Pro Gly Asp Val Ala Val  
                   85                  90                  95  
 Val Glu Val Gly Leu Gly Gly Arg Trp Asp Ala Thr Asn Val Val Asn  
           100                  105                  110  
 Ala Asp Val Ser Val Ile Thr Pro Val Gly Met Asp His Thr Asp Tyr  
       115                  120                  125  
 Leu Gly Glu Thr Ile Thr Glu Ile Ala Gly Glu Lys Ala Gly Ile Ile  
       130                  135                  140  
 Lys Pro Arg  
 145

<210> 273  
 <211> 864  
 <212> DNA  
 <213> Homo sapiens

<400> 273  
 caaagtaaga ctgcttcaaa ttttgtgttc tgctctgcag ctgctcccc cctgctgtcg  
 60  
 aagagaagcc aaagcccccc cccccacct caaaggctcg gaagtctggc atccctactt  
 120  
 ccgagcctgg atcccagtaa ggatcttgcc ctccctgcaa caccgagtgc cttagacagc  
 180  
 tgctgcctga gaactggcct ccagccggtg tcttcattcc atggggctcc ctgctgactg  
 240  
 catttctga tctgggatga tgtttaccag cccaaaacca gtcattgttct tccaaaagct  
 300  
 tctctttgat agaattttga ggccatgcc cctcccttcc agtcacatg gaattccaga  
 360  
 atcagtcaca gcctctgatt ttttccaaga agagattgcc ttcaccattg ttaaattgtca  
 420  
 gcctgtacgg cagagacatg gtggtctgca caagcctgga caagttcttc catattgatg  
 480  
 gtgggagcaa cccctgtaat ctactccttg gaaggatttt ttgctttgct tatgaaaagc  
 540  
 tgtgcttgag acttaggtac ttttctcagc tggacacact gatcccatcc catattgcat  
 600



ctttgaagag atggatatca agtacacttt ggtagctgaa ataatcatat ctttctgatg  
 660  
 tctattgtat ctcctttgag gaaaagaaca cacattttta atggagattg gctgctttca  
 720  
 ggtatgtgtg tctatcattg aaagagcatg gactcaaaca tcagccctga gttcttgagt  
 780  
 ccaccaact cccatcttct tgtggcacag gaaagctgcc ctctccctct ccaccacac  
 840  
 tcctgactaa tgcccttcac gcgt  
 864

<210> 274

<211> 116

<212> PRT

<213> Homo sapiens

<400> 274

Met	Trp	Thr	Gly	Arg	Glu	Val	Ala	Trp	Pro	Gln	Asn	Ser	Ile	Lys	Glu
1				5				10						15	
Lys	Leu	Leu	Glu	Glu	His	Asp	Trp	Phe	Trp	Ala	Gly	Lys	His	His	Pro
			20					25					30		
Arg	Ser	Gly	Asn	Ala	Val	Ser	Arg	Glu	Pro	His	Gly	Met	Arg	Thr	Pro
		35					40					45			
Ala	Gly	Gly	Gln	Phe	Ser	Gly	Ser	Ser	Cys	Leu	Arg	His	Ser	Val	Leu
	50					55					60				
Gln	Gly	Gly	Gln	Asp	Pro	Tyr	Trp	Asp	Pro	Gly	Ser	Glu	Val	Gly	Met
65					70				75					80	
Pro	Asp	Phe	Arg	Ala	Phe	Glu	Val	Gly	Gly	Gly	Phe	Gly	Phe	Gly	Ser
			85					90					95		
Ser	Thr	Ala	Gly	Ser	Glu	Leu	Gln	Ser	Arg	Thr	Gln	Asn	Leu	Lys	
		100					105					110			
Gln	Ser	Tyr	Phe												
		115													

<210> 275

<211> 911

<212> DNA

<213> Homo sapiens

<400> 275

naaatttaaa ggaacctccc ttctataacg gagagtattt attgcagctt tcctttctgt  
 60  
 ttatttttcag gaatgaaagg aattacccag ccttctgctt ttatacctac agctgaaagt  
 120  
 aattcctttc agcctcaggt gaagactttg ccatctccaa ttgatgctaa acagcagttg  
 180  
 caacggaaaa tccagaagaa gcagcaagaa cagaaactac aatccccctt gccaggagaa  
 240  
 tctgcagcaa aaaagtcaga aagtgtctaca agcaatggag tgactaatct tcctaattgga  
 300  
 aatccttcaa tcctttctcc tcaacctatt ggtatcgttg tggcagctgt ccctagctcc  
 360  
 attccggtcc agcggactag gcaattggta acttcaccga gtccaatgag ttcttctnga  
 420

cggcaaagtt cttccctca atgtacaggt ggtcactcag cacatgcagt ctgtgaaaca  
 480  
 ggcaccaaag actccccaga acgttccagc agtcctgggtg ggaatcggtc tgcccggcac  
 540  
 cgttaccctc agatcttacc caaaccagcg aacaccagtg cactcaccat tcgctctcca  
 600  
 actactgtcc tctttactag tagtcccatc aaaactgctg ttgtaccgcg ttcacacatg  
 660  
 agttctctaa atgtgggtgaa aatgacaaca atatccctca caccagcaa cagtaacacc  
 720  
 cctcttaaac attctgcctc agtcagcagt gctacaggaa caacagaaga atcaaggagt  
 780  
 gttccacaga tcaagaatgg ttctgtcgtg tcgcttcagt ctctgggtc caggagcagc  
 840  
 agtgcggggg gaacatctgc tgtggaagtc aaagtggaac ccgaaacatc atcagatgag  
 900  
 catcctgtac a  
 911

<210> 276

<211> 279

<212> PRT

<213> Homo sapiens

<400> 276

Met	Lys	Gly	Ile	Thr	Gln	Pro	Ser	Ala	Phe	Ile	Pro	Thr	Ala	Glu	Ser
1				5					10					15	
Asn	Ser	Phe	Gln	Pro	Gln	Val	Lys	Thr	Leu	Pro	Ser	Pro	Ile	Asp	Ala
			20					25					30		
Lys	Gln	Gln	Leu	Gln	Arg	Lys	Ile	Gln	Lys	Lys	Gln	Gln	Glu	Gln	Lys
			35				40					45			
Leu	Gln	Ser	Pro	Leu	Pro	Gly	Glu	Ser	Ala	Ala	Lys	Lys	Ser	Glu	Ser
			50				55				60				
Ala	Thr	Ser	Asn	Gly	Val	Thr	Asn	Leu	Pro	Asn	Gly	Asn	Pro	Ser	Ile
65					70				75					80	
Leu	Ser	Pro	Gln	Pro	Ile	Gly	Ile	Val	Val	Ala	Ala	Val	Pro	Ser	Pro
				85				90						95	
Ile	Pro	Val	Gln	Arg	Thr	Arg	Gln	Leu	Val	Thr	Ser	Pro	Ser	Pro	Met
			100				105					110			
Ser	Ser	Ser	Xaa	Arg	Gln	Ser	Ser	Ser	Pro	Gln	Cys	Thr	Gly	Gly	His
			115				120					125			
Ser	Ala	His	Ala	Val	Cys	Glu	Thr	Gly	Thr	Lys	Asp	Ser	Pro	Glu	Arg
			130				135				140				
Ser	Ser	Ser	Pro	Gly	Gly	Asn	Arg	Ser	Ala	Arg	His	Arg	Tyr	Pro	Gln
145					150				155					160	
Ile	Leu	Pro	Lys	Pro	Ala	Asn	Thr	Ser	Ala	Leu	Thr	Ile	Arg	Ser	Pro
				165				170					175		
Thr	Thr	Val	Leu	Phe	Thr	Ser	Ser	Pro	Ile	Lys	Thr	Ala	Val	Val	Pro
			180					185					190		
Ala	Ser	His	Met	Ser	Ser	Leu	Asn	Val	Val	Lys	Met	Thr	Thr	Ile	Ser
			195				200					205			
Leu	Thr	Pro	Ser	Asn	Ser	Asn	Thr	Pro	Leu	Lys	His	Ser	Ala	Ser	Val
			210				215				220				
Ser	Ser	Ala	Thr	Gly	Thr	Thr	Glu	Glu	Ser	Arg	Ser	Val	Pro	Gln	Ile



Gly Asp Asp Ser Gly Val Ala Asp Thr Gly Glu Ala Asp Val Pro Gly  
85 90 95  
100 105 110  
Ser Gly Ser  
115

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<210> 279
<211> 348
<212> DNA
<213> Homo sapiens
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```
<400> 279
cgggaggtca cacaagcatt caaaccatag cagatggtaa atgttatgtt atgtgtattt
60
taccacaatc cttaaaaaga aaagaaagaa aggcatatgg aaccacctagt tacctctcat
120
ccagcttcaa aattgtcagt gcatgggtcaa tcttgtctta tctgcccctc acccaccctt
180
ttccagaaag aagaccaga ggattccaca tctgcctgga aaccacgacc agtctcgact
240
ggaagtgtgt gttaatgttg catgtattca taaaacctct aggcatttct agtgtccctc
300
agaatttttc caaattcagg caaacacaga aattacttcc aaaaattt
348
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<210> 280
<211> 99
<212> PRT
<213> Homo sapiens
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<400> 280
Met Cys Ile Leu Pro Gln Ser Leu Lys Arg Lys Glu Arg Lys Ala Tyr
  1             5             10             15
Gly Thr Pro Ser Tyr Leu Ser Ser Ser Phe Lys Ile Val Ser Ala Trp
          20             25             30
Ser Ile Leu Ser Tyr Leu Pro Leu Thr His Pro Phe Pro Glu Arg Arg
        35             40             45
Pro Arg Gly Phe His Ile Cys Leu Glu Thr Thr Thr Ser Leu Asp Trp
    50             55             60
Lys Leu Leu Leu Met Leu His Val Phe Ile Lys Pro Leu Gly Ile Ser
65             70             75             80
Ser Val Pro Gln Asn Phe Ser Lys Phe Arg Gln Thr Gln Lys Leu Leu
          85             90             95
Pro Lys Ile

```

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<210> 281
<211> 384
<212> DNA
<213> Homo sapiens
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<400> 281
agatctgcgc agatcgataa tggattaaag actcttgacg ctggagtcac cgagatgaac
60
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aacaaggtgt tgggggcaac gaaggctgtc ggtgattcca ccactaccgt caaccaggtg  
120  
aattctgcgt taggaantgc cgactcagcg gcagagaaga cgtcgagcgc cgttactcag  
180  
acgcgcgtgg gtgccaggc gattaccggc gctgctcaaa atgtcatggc tgattcccaa  
240  
gctgtcaact cagccatggg tccgcttatt aataacgtga caaagaatct tcctaccttg  
300  
caaaaacagg ccaggaatct cgtgtcagtg aacggtaccc tgcagaaccc caacggtgat  
360  
tctgtcatta agattcaaca gacc  
384

<210> 282

<211> 110

<212> PRT

<213> Homo sapiens

<400> 282

Met	Asn	Asn	Lys	Val	Leu	Gly	Ala	Thr	Lys	Ala	Val	Gly	Asp	Ser	Thr
1			5						10				15		
Thr	Thr	Val	Asn	Gln	Val	Asn	Ser	Ala	Leu	Gly	Xaa	Ala	Asp	Ser	Ala
		20					25					30			
Ala	Glu	Lys	Thr	Ser	Ser	Ala	Val	Thr	Gln	Thr	Arg	Val	Gly	Ala	Gln
	35					40					45				
Ala	Ile	Thr	Gly	Ala	Ala	Gln	Asn	Val	Met	Ala	Asp	Ser	Gln	Ala	Val
50					55					60					
Asn	Ser	Ala	Met	Val	Pro	Leu	Ile	Asn	Asn	Val	Thr	Lys	Asn	Leu	Pro
65				70					75				80		
Thr	Leu	Gln	Lys	Gln	Ala	Arg	Asn	Leu	Val	Ser	Val	Asn	Gly	Thr	Leu
		85					90					95			
Gln	Asn	Pro	Asn	Gly	Asp	Ser	Val	Ile	Lys	Ile	Gln	Gln	Thr		
		100					105					110			

<210> 283

<211> 426

<212> DNA

<213> Homo sapiens

<400> 283

cgcgtagacc aatgtgagac ggccgtcacc aagggcacgc gcgacaagtc ggttggttagc  
60  
ggaccggata ttgtgcgtcg cgagctgcgc catgtcgtga cgagcggcac gattgtcgat  
120  
ggaagcgtac tggctgacga attgagcagc tactgcatga gtatcaagga gcacgtccgc  
180  
tctgatggcc tatccgagtt tggcatctgc accctcgacg ccgccaccgc cgagttccga  
240  
tacatgacat tcgtcgacga tgccgtgctg tcacaactcg agacattgct gcgttctcta  
300  
cgcacaaagg aagtcttgca tgaaaaaggg gtcattgttc cttccacgct gcgcttgatc  
360  
cgcaacgcgg tgcccaccac ctgccaaatt accatgctca agcctgatac cgaattgtcg  
420

gagaga  
426

<210> 284  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 284  
Arg Val Asp Gln Cys Glu Thr Ala Val Thr Lys Gly Met Arg Asp Lys  
1 5 10 15  
Ser Val Gly Ser Gly Pro Asp Ile Val Arg Arg Glu Leu Arg His Val  
20 25 30  
Val Thr Ser Gly Thr Ile Val Asp Gly Ser Val Leu Ala Asp Glu Leu  
35 40 45  
Ser Ser Tyr Cys Met Ser Ile Lys Glu His Val Arg Ser Asp Gly Leu  
50 55 60  
Ser Glu Phe Gly Ile Cys Thr Leu Asp Ala Ala Thr Ala Glu Phe Arg  
65 70 75 80  
Tyr Met Thr Phe Val Asp Asp Ala Val Leu Ser Gln Leu Glu Thr Leu  
85 90 95  
Leu Arg Ser Leu Arg Ile Lys Glu Val Leu His Glu Lys Gly Val Met  
100 105 110  
Leu Pro Ser Thr Leu Arg Leu Ile Arg Asn Ala Val Pro Thr Thr Cys  
115 120 125  
Gln Ile Thr Met Leu Lys Pro Asp Thr Glu Leu Ser Glu Arg  
130 135 140

<210> 285  
<211> 345  
<212> DNA  
<213> Homo sapiens

<400> 285  
acgcgtgcag tcccttaccg acatgctggc agatgagctc gacggcagcc gcttcaccgg  
60  
cgattttctca gaaatctaca aacgtcagaa ctcgatcttc ggcgatgtaa ggaataactt  
120  
ttacaaaaaa ggataccgca tcatcaacgt agcgaatggt gtattgcgca agatttcact  
180  
ggtaagcgca ggcaatgcag acaatgtgaa aggtcaggcc ctgttcttcc gcggtgtggc  
240  
gcatttcgaa ctcgctgcgtt tgtttgcaca accctgggggt tatacttcgg acaattcaca  
300  
ctacggcatc ccgctccgca atgaaatcgt aattgggttct attcn  
345

<210> 286  
<211> 107  
<212> PRT  
<213> Homo sapiens

<400> 286  
Met Leu Ala Asp Glu Leu Asp Gly Ser Arg Phe Thr Gly Asp Phe Ser

1	5	10	15
Glu Ile Tyr Lys Arg Gln Asn Ser Ile Phe Gly Asp Val Arg Asn Asn			
20	25	30	
Phe Tyr Lys Lys Gly Tyr Arg Ile Ile Asn Val Ala Asn Gly Val Leu			
35	40	45	
Arg Lys Ile Ser Leu Val Ser Ala Gly Asn Ala Asp Asn Val Lys Gly			
50	55	60	
Gln Ala Leu Phe Phe Arg Gly Val Ala His Phe Glu Leu Val Arg Leu			
65	70	75	80
Phe Ala Gln Pro Trp Gly Tyr Thr Ser Asp Asn Ser His Tyr Gly Ile			
85	90	95	
Pro Leu Arg Asn Glu Ile Val Ile Gly Ser Ile			
100	105		

&lt;210&gt; 287

&lt;211&gt; 1379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 287

```

nnttaactgc ccctttgcag tctttattct gggacattag cactgtctgg ttatcttgct
60
tcagttgagg gattcgggac aatagcagtg ctgatggtaa tgttggcgat ttccctgttt
120
gttttgcagg tcacggccag gggctttggg ccgctgttac agtttgccta cactgccaag
180
ctgttactca gcagagaaaa catccgcgag gtcacccgct gtgctgagtt cctgcgcatg
240
cacaacctgg aggactcctg cttcagcttc ctgcagaccc agctcctgaa cagtgaggat
300
ggcctgtttg tgtgccggaa ggatgctgcg tgccagcgcc cacacgagga ctgcgagaac
360
tctgcaggag aggaggagga tgaagaggag gagacgatgg attcagagac ggccaagatg
420
gcttgcccca gggaccagat gcttcagag cccatcagct ttgaggccgc cgccatcccc
480
gtagcagaga aggaagaagc cctgctgccc gagcctgacg tgccacaga caccaaggag
540
agctcagaaa aggacgcgtt aacgcagtac cccagatata agaaatacca gcttgcattg
600
accaagaatg tctataatgc atcatcacac agtacctcag gttttgcaag cacattccgg
660
gaagataact cttagcaacag cctcaagccg gggcttgcca gggggcagat taaaagtgg
720
ccgcccagtg aagagaatga ggaagagagc atcacgctct gcctgtctgg agatgagcct
780
gacgccaagg acagagcggg ggatgtcgag atggaccgga aacagcccag ccctgcccct
840
acccccacgg ccccagctgg ggccgcctgc ctggagagat ccaggagcgt ggcctcgccc
900
tcttgcttaa ggtctctgtt cagcataacg aaaagtgtgg agctgtctgg cctgcccagt
960
acatctcagc agcactttgc caggagtcca gcctgccctt ttgacaaggg gatcactcag
1020

```

ggtgacctta aaactgacta cacccttttc acaggggaatt atggacagcc ccacgtgggc  
 1080  
 cagaaggagg tgtccaactt caccatgggg tcgcccctca gggggcctgg gttggaggct  
 1140  
 ctctgtaaac aggagggaga gctggaccgg aggagcgtga tcttctcttc cagcgcttgt  
 1200  
 gaccaagtga gcacctcggt gcattcttat tctgggggtga gcagtttga caaagacctc  
 1260  
 tctgagccgg tgccaaaggg tctgtgggtg ggagccggcc agtccctccc cagctcgag  
 1320  
 gcctactccc acggtgggct gatggccgac cacttgccag gaaggatgcg gcccaacac  
 1379

<210> 288

<211> 428

<212> PRT

<213> Homo sapiens

<400> 288

Met	Val	Met	Leu	Ala	Ile	Ser	Leu	Phe	Val	Leu	Gln	Val	Thr	Ala	Arg
1			5					10						15	
Gly	Phe	Gly	Pro	Leu	Leu	Gln	Phe	Ala	Tyr	Thr	Ala	Lys	Leu	Leu	
			20					25					30		
Ser	Arg	Glu	Asn	Ile	Arg	Glu	Val	Ile	Arg	Cys	Ala	Glu	Phe	Leu	Arg
		35					40					45			
Met	His	Asn	Leu	Glu	Asp	Ser	Cys	Phe	Ser	Phe	Leu	Gln	Thr	Gln	Leu
	50					55					60				
Leu	Asn	Ser	Glu	Asp	Gly	Leu	Phe	Val	Cys	Arg	Lys	Asp	Ala	Ala	Cys
65					70					75					80
Gln	Arg	Pro	His	Glu	Asp	Cys	Glu	Asn	Ser	Ala	Gly	Glu	Glu	Glu	Asp
			85						90					95	
Glu	Glu	Glu	Glu	Thr	Met	Asp	Ser	Glu	Thr	Ala	Lys	Met	Ala	Cys	Pro
			100					105					110		
Arg	Asp	Gln	Met	Leu	Pro	Glu	Pro	Ile	Ser	Phe	Glu	Ala	Ala	Ala	Ile
		115					120					125			
Pro	Val	Ala	Glu	Lys	Glu	Glu	Ala	Leu	Leu	Pro	Glu	Pro	Asp	Val	Pro
		130					135					140			
Thr	Asp	Thr	Lys	Glu	Ser	Ser	Glu	Lys	Asp	Ala	Leu	Thr	Gln	Tyr	Pro
145					150					155					160
Arg	Tyr	Lys	Lys	Tyr	Gln	Leu	Ala	Cys	Thr	Lys	Asn	Val	Tyr	Asn	Ala
			165						170					175	
Ser	Ser	His	Ser	Thr	Ser	Gly	Phe	Ala	Ser	Thr	Phe	Arg	Glu	Asp	Asn
			180					185					190		
Ser	Ser	Asn	Ser	Leu	Lys	Pro	Gly	Leu	Ala	Arg	Gly	Gln	Ile	Lys	Ser
		195					200					205			
Glu	Pro	Pro	Ser	Glu	Glu	Asn	Glu	Glu	Glu	Ser	Ile	Thr	Leu	Cys	Leu
	210					215						220			
Ser	Gly	Asp	Glu	Pro	Asp	Ala	Lys	Asp	Arg	Ala	Gly	Asp	Val	Glu	Met
225					230					235					240
Asp	Arg	Lys	Gln	Pro	Ser	Pro	Ala	Pro	Thr	Pro	Thr	Ala	Pro	Ala	Gly
			245						250					255	
Ala	Ala	Cys	Leu	Glu	Arg	Ser	Arg	Ser	Val	Ala	Ser	Pro	Ser	Cys	Leu
		260						265					270		
Arg	Ser	Leu	Phe	Ser	Ile	Thr	Lys	Ser	Val	Glu	Leu	Ser	Gly	Leu	Pro



		275						280				285					
Ser	Thr	Ser	Gln	Gln	His	Phe	Ala	Arg	Ser	Pro	Ala	Cys	Pro	Phe	Asp		
	290					295					300						
Lys	Gly	Ile	Thr	Gln	Gly	Asp	Leu	Lys	Thr	Asp	Tyr	Thr	Pro	Phe	Thr		
305					310					315					320		
Gly	Asn	Tyr	Gly	Gln	Pro	His	Val	Gly	Gln	Lys	Glu	Val	Ser	Asn	Phe		
				325					330					335			
Thr	Met	Gly	Ser	Pro	Leu	Arg	Gly	Pro	Gly	Leu	Glu	Ala	Leu	Cys	Lys		
			340					345					350				
Gln	Glu	Gly	Glu	Leu	Asp	Arg	Arg	Ser	Val	Ile	Phe	Ser	Ser	Ser	Ala		
		355					360				365						
Cys	Asp	Gln	Val	Ser	Thr	Ser	Val	His	Ser	Tyr	Ser	Gly	Val	Ser	Ser		
	370					375				380							
Leu	Asp	Lys	Asp	Leu	Ser	Glu	Pro	Val	Pro	Lys	Gly	Leu	Trp	Val	Gly		
385				390					395						400		
Ala	Gly	Gln	Ser	Leu	Pro	Ser	Ser	Gln	Ala	Tyr	Ser	His	Gly	Gly	Leu		
			405					410						415			
Met	Ala	Asp	His	Leu	Pro	Gly	Arg	Met	Arg	Pro	Asn						
		420					425										

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<210> 289
<211> 822
<212> DNA
<213> Homo sapiens
```

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<400> 289
ngcattaccg ggctgaagac ggggtgctcat gacctcaacg atataggcta ttgctagaac
60
cacgccggcc cacgccgcgc aaagcgcaga cacggcacca ggaggggtca catggctgat
120
agcaagtcga aggcgaagga cgagcgcact gccgatgaga tcaggcggga tattgcagcg
180
acccgtgctt gcctggcagc cgggggtggag aacctcgtgg aggaggtgca tccggcaacc
240
ctcaagcgtg aagcatctga tcgtgcccgt gattttgtgc aggggtgagtt tgatcaggtc
300
aagagccagg tcaaagatga gaaatggtgg cgcgtgcagc ggatcgcgat ggccgcagga
360
gtgctcgtg ccggcgtcgt cagcattatt gtgctgcgcg cgatagtcgg tcgcgcaacg
420
ggcgctaccg ctcgctcga gcttgagaag ctgcagcttt ctcaggcgaa gcggggttcga
480
aaagatgcca agcagcgtag taaggaagat gaaaaggcag ccaagaaaaa tgccaagctc
540
ggcaagaaga acgctaagaa gtacggcaag ctcgataccg atgactcgtc ggtaagcaac
600
cttgccgaga aaatgctcaa acaggccgcc gtgctgcgtg cacaggcggc tgccggggcg
660
tgagaacagt gccgcctagc aaacagcggc cacagcgcaa aacaggtttg gctccgacc
720
atggtggacc ggagccaaac tgtgttaccg catcatttga taccgccagc agccaggcct
780
gcgacaatgc gacgctggaa taccagcacc atgatgacta gt
822

```

<210> 290  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 290  
 Met Ala Asp Ser Lys Ser Lys Ala Lys Asp Glu Arg Thr Ala Asp Glu  
   1                  5                  10                  15  
 Ile Arg Arg Asp Ile Ala Ala Thr Arg Ala Cys Leu Ala Ala Gly Val  
           20                  25                  30  
 Glu Asn Leu Val Glu Glu Val His Pro Ala Thr Leu Lys Arg Glu Ala  
           35                  40                  45  
 Ser Asp Arg Ala Arg Asp Phe Val Gln Gly Glu Phe Asp Gln Val Lys  
           50                  55                  60  
 Ser Gln Val Lys Asp Glu Lys Trp Trp Arg Val Gln Arg Ile Ala Met  
   65                  70                  75                  80  
 Ala Ala Gly Val Leu Ala Ala Gly Val Val Ser Ile Ile Val Leu Arg  
                   85                  90                  95  
 Ala Ile Val Gly Arg Ala Thr Gly Ala Thr Ala Arg Arg Lys Leu Glu  
           100                  105                  110  
 Lys Leu Gln Leu Ser Gln Ala Lys Arg Val Arg Lys Asp Ala Lys Gln  
           115                  120                  125  
 Arg Ser Lys Glu Asp Glu Lys Ala Ala Lys Lys Asn Ala Lys Leu Gly  
           130                  135                  140  
 Lys Lys Asn Ala Lys Lys Tyr Gly Lys Leu Asp Thr Asp Asp Ser Ser  
   145                  150                  155                  160  
 Val Ser Asn Leu Ala Glu Lys Met Leu Lys Gln Ala Ala Val Leu Arg  
                   165                  170                  175  
 Ala Gln Ala Ala Ala Gly Ala  
           180

<210> 291  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 291  
 ctccacgccg acaagactta cgacgggcgt cgctgccggg ctgagtgcgc ggcccgcctcc  
   60  
 atcaccccc gcacgcctcg ccgcggcgctg gagaccagcg agcgcttggg ccggtatcgc  
   120  
 tgggtcgctg agcgcacctt cgctgggctc aaccgcttcc ggcgccctgc catccgctac  
   180  
 gagcggcgctg ctgacatcca cgaagccttc gtgatcctcg gctgcgcctt catctgcctc  
   240  
 aaccagatca gacggttttg ttaggtgctg taaagggaga atggctgcag ctgggctatc  
   300  
 tgctccctcg tcaaccagaa acaggctgct catcctcact caacaacgcg t  
   351

<210> 292  
 <211> 87  
 <212> PRT

<213> Homo sapiens

<400> 292

```

Leu His Ala Asp Lys Thr Tyr Asp Gly Arg Arg Cys Arg Ala Glu Cys
 1           5           10           15
Arg Ala Arg Ser Ile Thr Pro Arg Ile Ala Arg Arg Gly Val Glu Thr
          20           25           30
Ser Glu Arg Leu Gly Arg Tyr Arg Trp Val Val Glu Arg Thr Phe Ala
          35           40           45
Trp Leu Asn Arg Phe Arg Arg Leu Ala Ile Arg Tyr Glu Arg Arg Ala
          50           55           60
Asp Ile His Glu Ala Phe Val Ile Leu Gly Cys Ala Leu Ile Cys Leu
65           70           75           80
Asn Gln Ile Arg Arg Phe Cys
          85

```

<210> 293

<211> 716

<212> DNA

<213> Homo sapiens

<400> 293

```

nncttcacca caccggccat caacgcacct cctcgtgata acttgacctt ctgccgaacc
60
ggttaatcag tttagtggcg aggcattgaca cgttgacgag tcagctgtgg tacatgtgcg
120
gaacactcac aatgccacgg cggcatgttg ctgtcgggtca cgacccttat ggtgatcgct
180
gtgagaaccc gaacggcaga tgcgattctg gcggcactgg atctgaacag gtttaagggtt
240
gcgaagactt tcgatgttcc agtgtgcgtc atagctgggtg ccgggacagg taaaactcgt
300
gctgtcactc atcgatttgc ctacggtgca gcgacaggca agcttgatcc gcgtcgtacc
360
ctcgcggtca cttttacgac taaggcagct ggcacgatga gaggtcgact cgccgatctg
420
gggggttggtg gtgtgcaggc tcgcactatt cattctgcgg cgttgcggca gatcaagttt
480
ttctggcctc gtgcatataa ctgtgagttg ccaccggtga gtgattctcg tttctcgatg
540
gtggcgggaga cgacccatcg cattggtctg ggcaatgaca aggcgctgct gcgcgacttg
600
tccgccgaga tctcgtgggc gaaggctctca aatgtgccga ctgatcaata cgcattccctg
660
gctagggcgg aaggctcgggt ggtggcggga gtttcggcaa ctgacgtagg acgcgt
716

```

<210> 294

<211> 190

<212> PRT

<213> Homo sapiens

<400> 294

```

Met Leu Leu Ser Val Thr Thr Leu Met Val Ile Ala Val Arg Thr Arg

```

1	5	10	15
Thr Ala Asp Ala Ile Leu Ala Ala Leu Asp Leu Asn Arg Phe Lys Val			
	20	25	30
Ala Lys Thr Phe Asp Val Pro Val Cys Val Ile Ala Gly Ala Gly Thr			
	35	40	45
Gly Lys Thr Arg Ala Val Thr His Arg Ile Ala Tyr Gly Ala Ala Thr			
	50	55	60
Gly Lys Leu Asp Pro Arg Arg Thr Leu Ala Val Thr Phe Thr Thr Lys			
65	70	75	80
Ala Ala Gly Thr Met Arg Gly Arg Leu Ala Asp Leu Gly Val Val Gly			
	85	90	95
Val Gln Ala Arg Thr Ile His Ser Ala Ala Leu Arg Gln Ile Lys Phe			
	100	105	110
Phe Trp Pro Arg Ala Tyr Asn Cys Glu Leu Pro Pro Val Ser Asp Ser			
	115	120	125
Arg Phe Ser Met Val Ala Glu Thr Thr His Arg Ile Gly Leu Gly Asn			
	130	135	140
Asp Lys Ala Leu Leu Arg Asp Leu Ser Ala Glu Ile Ser Trp Ala Lys			
145	150	155	160
Val Ser Asn Val Pro Thr Asp Gln Tyr Ala Ser Leu Ala Arg Ala Glu			
	165	170	175
Gly Arg Val Val Ala Gly Val Ser Ala Thr Asp Val Gly Arg			
	180	185	190

<210> 295  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

<400> 295  
 ttcatatcag gcagtacccg agtccatgcg atcaacaacg tcagcgtatc tttcacccat  
 60  
 tctggagtgc acctttctcat gggagaaagc ggatcaggaa aaagcaccct catcaatctc  
 120  
 ctagctggtc tggatacccc agattcgggg tccgtctacg cagaaggcgt caccgtatct  
 180  
 gatcagagcg aggcgagcag agcccaattt cgattacgcc acatcgccgt catcttccag  
 240  
 gacgacaacc tcatecgtga gttgaccaat accgagaata ttgcgctacc cctgtgggcg  
 300  
 cagggcacat cgaagtccga tgccactgaa atcgcccacg aagccatgcg aaaactagga  
 360  
 atcgagtcac tgggcagacg ctaccccggc gaggtctcgg gtggccaacg gcaacgc  
 417

<210> 296  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 296  
 Phe Ile Ser Gly Ser Thr Arg Val His Ala Ile Asn Asn Val Ser Val  
 1 5 10 15  
 Ser Phe Thr His Ser Gly Val His Leu Leu Met Gly Glu Ser Gly Ser

```

          20          25          30
Gly Lys Ser Thr Leu Ile Asn Leu Leu Ala Gly Leu Asp Thr Pro Asp
          35          40          45
Ser Gly Ser Val Tyr Ala Glu Gly Val Thr Val Ser Asp Gln Ser Glu
          50          55          60
Ala Ser Arg Ala Gln Phe Arg Leu Arg His Ile Ala Val Ile Phe Gln
65          70          75          80
Asp Asp Asn Leu Ile Ala Glu Leu Thr Asn Thr Glu Asn Ile Ala Leu
          85          90          95
Pro Leu Trp Ala Gln Gly Thr Ser Lys Ser Asp Ala Thr Glu Ile Ala
          100          105          110
His Glu Ala Met Arg Lys Leu Gly Ile Glu Ser Leu Gly Arg Arg Tyr
          115          120          125
Pro Gly Glu Val Ser Gly Gly Gln Arg Gln Arg
          130          135

```

&lt;210&gt; 297

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 297

```

tacaccatcg gtgaccagat tgtcgaagct ctgcaggtgc actcgaagat gtccgacaag
60
gacgcttggg cgcgtgccat cgagctgctc gacttggtgg ggattccgaa tcccgagggtg
120
cgtgccaaag cttttccgca cgagttttcc ggtggcatga ggcaacgagt cgtcatcgcc
180
atggccatcg cgaacgaccc tgacctcatc atcgccgacg agccgacgac ggccctcgac
240
gtgaccatcc aggcccagat tctcgatttg ctgcgcgtag cccagcgtga aacccatgcg
300
ggcgtcgtaa tgatcaccca cgacctcggt gtggtagctg gtctggctga cagggttgcc
360
gtgatgtatg ccggacgc
378

```

&lt;210&gt; 298

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 298

```

Tyr Thr Ile Gly Asp Gln Ile Val Glu Ala Leu Gln Val His Ser Lys
1          5          10          15
Met Ser Asp Lys Asp Ala Trp Ala Arg Ala Ile Glu Leu Leu Asp Leu
          20          25          30
Val Gly Ile Pro Asn Pro Glu Val Arg Ala Lys Ala Phe Pro His Glu
          35          40          45
Phe Ser Gly Gly Met Arg Gln Arg Val Val Ile Ala Met Ala Ile Ala
          50          55          60
Asn Asp Pro Asp Leu Ile Ile Ala Asp Glu Pro Thr Thr Ala Leu Asp
65          70          75          80
Val Thr Ile Gln Ala Gln Ile Leu Asp Leu Leu Arg Val Ala Gln Arg

```

	85		90		95
Glu Thr His	Ala Gly Val Val Met	Ile Thr His Asp Leu Gly Val Val			
	100	105		110	
Ala Gly Leu Ala Asp Arg Val	Ala Val Met Tyr Ala Gly Arg				
	115	120		125	

<210> 299  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 299  
 gtgcacgggtt tcgttgcat gcgcaatgac cgggagaact tgcgttttga tccgagactt  
 60  
 ccagcccaat ggacgtcgat caaacaccac atgctcattg gcgactctca catgctcggt  
 120  
 ttcttgaac gtgacgcat tacgttccag attctgtcgg gccatgaccg cgacgtgaca  
 180  
 gtgcgcggtg agctctacca cattgggggtt gagccggtga ggggtgccgtt gtccgatcag  
 240  
 gggccgttgc gtcttagcct gcgcgttacc catccgatct cgggggttgcg tcgagctgac  
 300  
 ggttctctta tcaactgcaga agttcccggc agcattgctg agacgattgg gtcttctccg  
 360  
 atctcgac  
 368

<210> 300  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 300  
 Val His Gly Phe Val Gly Met Arg Asn Asp Arg Glu Asn Leu Arg Phe  
 1 5 10 15  
 Asp Pro Arg Leu Pro Ala Gln Trp Thr Ser Ile Lys His His Met Leu  
 20 25 30  
 Ile Gly Asp Ser His Met Leu Val Phe Leu Glu Arg Asp Ala Ile Thr  
 35 40 45  
 Phe Gln Ile Leu Ser Gly His Asp Arg Asp Val Thr Val Arg Gly Glu  
 50 55 60  
 Leu Tyr His Ile Gly Val Glu Pro Val Arg Val Pro Leu Ser Asp Gln  
 65 70 75 80  
 Gly Pro Leu Arg Pro Ser Leu Arg Val Thr His Pro Ile Ser Gly Leu  
 85 90 95  
 Arg Arg Ala Asp Gly Ser Leu Ile Thr Ala Glu Val Pro Gly Ser Ile  
 100 105 110  
 Ala Glu Thr Ile Gly Ser Ser Pro Ile Ser  
 115 120

<210> 301  
 <211> 456  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 301

ggccgggtta ttgccgccc gtttgtcggg gaaacccggc agaccttcga gcgcaccggc  
60  
aacgggcgcg actattccgt accgccgccc gaaccgacct tgctcgacag gcttacggac  
120  
gcggggccgga cggatgatcg aatcggcaag attggtgata tctacgcgca caaaggcgtg  
180  
tctcaggtgc gtaaggcaat ggcaatattg gccttggttcg atgaaacact cattgccatg  
240  
gacgacgcgc aggacggcga tctggtcttc accaacttcg tggatttcga catgctctac  
300  
gggcatcgca gggatgtgcc cggtatgcc gccgcgctcg aggctttcga ccggaggctg  
360  
ccggaagcca tggcgaaatt gcggacgggc gatottctga tcttgacagc cgatcatggc  
420  
tgcgaccga cctcaaggg aaccgaccac acgcgt  
456

&lt;210&gt; 302

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 302

Gly	Arg	Val	Ile	Ala	Arg	Pro	Phe	Val	Gly	Glu	Thr	Arg	Gln	Thr	Phe
1				5					10					15	
Glu	Arg	Thr	Gly	Asn	Arg	Arg	Asp	Tyr	Ser	Val	Pro	Pro	Pro	Glu	Pro
			20					25					30		
Thr	Leu	Leu	Asp	Arg	Leu	Thr	Asp	Ala	Gly	Arg	Thr	Val	Ile	Ala	Ile
		35					40					45			
Gly	Lys	Ile	Gly	Asp	Ile	Tyr	Ala	His	Lys	Gly	Val	Ser	Gln	Val	Arg
	50				55						60				
Lys	Ala	Met	Ala	Ile	Leu	Ala	Leu	Phe	Asp	Glu	Thr	Leu	Ile	Ala	Met
65					70					75					80
Asp	Asp	Ala	Gln	Asp	Gly	Asp	Leu	Val	Phe	Thr	Asn	Phe	Val	Asp	Phe
			85						90					95	
Asp	Met	Leu	Tyr	Gly	His	Arg	Arg	Asp	Val	Pro	Gly	Tyr	Ala	Ala	Ala
			100						105				110		
Leu	Glu	Ala	Phe	Asp	Arg	Arg	Leu	Pro	Glu	Ala	Met	Ala	Lys	Leu	Arg
		115					120					125			
Thr	Gly	Asp	Leu	Leu	Ile	Leu	Thr	Ala	Asp	His	Gly	Cys	Asp	Pro	Thr
	130					135						140			
Leu	Lys	Gly	Thr	Asp	His	Thr	Arg								
145						150									

&lt;210&gt; 303

&lt;211&gt; 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 303

nncgtgggca tcgaggagtt cctcgacatg aagtatcagc cgacgccgat tcacgctcgc  
60

tgacagcggg tttccggaac acatcagcgt tcagacagga gcgaggagac catgtacctg  
 120  
 ggtgctcagc tggtcagtga cagcgagtac gagcagcgcc tgagacgtgt ccgtagagctc  
 180  
 atggaccgtc aggggtctgtc ggcgatcatc gtcaccgatc cggccaacat cttctatctg  
 240  
 atcggttaca acgcctggtc gttctacacc ccgcagatgc tgttcgtgcc gatcgacgga  
 300  
 gagatgggcc tctacgctcg cgagatggat cgcattggcg acatcngcac gacgtcggtg  
 360  
 cccgccgatc agatcgtcgg ttaccgggag agttatgtgc ac  
 402

<210> 304

<211> 97

<212> PRT

<213> Homo sapiens

<400> 304

Met	Tyr	Leu	Gly	Ala	Gln	Leu	Phe	Ser	Asp	Ser	Glu	Tyr	Glu	Gln	Arg
1				5					10					15	
Leu	Arg	Arg	Val	Arg	Glu	Leu	Met	Asp	Arg	Gln	Gly	Leu	Ser	Ala	Ile
			20					25					30		
Ile	Val	Thr	Asp	Pro	Ala	Asn	Ile	Phe	Tyr	Leu	Ile	Gly	Tyr	Asn	Ala
			35				40					45			
Trp	Ser	Phe	Tyr	Thr	Pro	Gln	Met	Leu	Phe	Val	Pro	Ile	Asp	Gly	Glu
	50					55				60					
Met	Val	Leu	Tyr	Ala	Arg	Glu	Met	Asp	Arg	Met	Ala	His	Ile	Xaa	Thr
65					70				75					80	
Thr	Ser	Leu	Pro	Ala	Asp	Gln	Ile	Val	Gly	Tyr	Pro	Glu	Ser	Tyr	Val
				85				90						95	

His

<210> 305

<211> 375

<212> DNA

<213> Homo sapiens

<400> 305

nnacgcgtcg gttccgcata gagcgaccgg atcgcatcga cgagcacgct gcaccagtgc  
 60  
 gtgtcgtcct ggccaatatg ggcgatcagc cggtacagtt cgggatcgtc gctcacctcg  
 120  
 gccgccatct cggatgcgac acgcgcgcct gcgcgctcgg cctccagcaa ctcgtcgagc  
 180  
 gtcgccacca gcgcggcgcg atcttcatgc ggagtcagat cggcgcgggc gtcaggcccc  
 240  
 tcgccatgcg tcggaatcga catgcagcac ctcctgccca ggatcgatgg cgtaatacgt  
 300  
 gcgacggtag acggcgcggtg ttgcacgaac gtgcaaatca gcgcgtgcct cgtgccatat  
 360  
 acgtcacatc atatg  
 375



<210> 306  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 306  
 Xaa Arg Val Gly Ser Ala Ser Ser Asp Arg Ile Ala Ser Thr Ser Thr  
 1 5 10 15  
 Leu His Gln Cys Val Ser Ser Trp Arg Ile Trp Ala Ile Ser Arg Tyr  
 20 25 30  
 Ser Ser Gly Ser Ser Leu Thr Ser Ala Ala Ile Ser Asp Ala Thr Arg  
 35 40 45  
 Ala Pro Ala Arg Ser Ala Ser Ser Asn Ser Ser Ser Val Ala Thr Ser  
 50 55 60  
 Ala Ala Arg Ser Ser Cys Gly Val Arg Ser Ala Arg Ala Ser Gly Pro  
 65 70 75 80  
 Ser Pro Cys Val Gly Ile Asp Met Gln His Pro Pro Ala Arg Ile Asp  
 85 90 95  
 Gly Val Ile Arg Ala Thr Val His Gly Ala Cys Cys Thr Asn Val Gln  
 100 105 110  
 Ile Ser Ala Cys Leu Val Pro Tyr Thr Ser His His Met  
 115 120 125

<210> 307  
 <211> 685  
 <212> DNA  
 <213> Homo sapiens

<400> 307  
 actagtctctg gccgctcccc tggggctttg ggtaacaatt gtcagcccca cccatcctag  
 60  
 ggtaggaag gctattctct ttggccactc tcctcctaag acctatttgg agaacctctg  
 120  
 gggtttgagt ctttttttca gcagaatgag gcttgatccc gcattatagc acctcgaca  
 180  
 ttgatgtct cttcttctca cccactcacc ccacctggg ggttggggca aaaaagtggc  
 240  
 tcaaagctgc ggttcagagt tccttgtaaa caaggctcct ccctcactgt cctcacctg  
 300  
 ctccagcaga gggagcagcg gaaggaccac tctgctgcag ccatgcttgt ttctaacca  
 360  
 gcagaactgg acataatggg aacagggctc gaagacaatc aatccagggc tgcagtgggt  
 420  
 gctgagtctg gggaagcctc cacctggagg ggcagctggg cagtggcagc tcccttggaa  
 480  
 tggctcagcc tctggacatc accccacca accagagccc tggctcttgc tggatgtcca  
 540  
 cagatgagtg cctgggattg gtctcagcca ctatgggggg gatgtgcagg gagaggtgat  
 600  
 gagggagtga gcaggactgt ctatgtgcct ctgtcctcat cctgaggctt gggctctgaa  
 660  
 ttggtgctgc agcactggca cgcgt  
 685

<210> 308  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 308  
 Met Leu Val Ser Asn Pro Ala Glu Leu Asp Ile Met Gly Thr Gly Ser  
 1 5 10 15  
 Glu Asp Asn Gln Ser Arg Ala Ala Val Gly Ala Glu Ser Gly Glu Ala  
 20 25 30  
 Ser Thr Trp Arg Gly Ser Trp Ala Val Ala Ala Pro Leu Glu Trp Leu  
 35 40 45  
 Ser Leu Trp Thr Ser Pro His Pro Thr Arg Ala Leu Ala Leu Ala Gly  
 50 55 60  
 Cys Pro Gln Met Ser Ala Trp Asp Trp Ser Gln Pro Leu Trp Gly Gly  
 65 70 75 80  
 Cys Ala Gly Arg Gly Asp Glu Gly Val Ser Arg Thr Val Tyr Val Pro  
 85 90 95  
 Leu Ser Ser Ser  
 100

<210> 309  
 <211> 432  
 <212> DNA  
 <213> Homo sapiens

<400> 309  
 caggctcgta ctattcgat ccctgtgcat atggctcgagg tcatcaataa gctggctcgc  
 60  
 gtccagcgtc agatgctcca ggacctaggt cgtgagccca ccccggaaga gcttgccaac  
 120  
 gaactcgata tgaccgcaga gaaggctcatt gaggtgcaga aatacgggtcg cgagccgac  
 180  
 tcgctgcata cccactggg tgaggatggc gattctgagt tcggtgacct tattgaggat  
 240  
 tccgaggcca tcgtgccagc agacgccgtc aacttcaccc tgttgcagga gcagctgcat  
 300  
 gatgtcctcg ataccttgtc cgagcgagag gccggtgtcg tgcgatgcg attcggcttg  
 360  
 accgacggac agcccaagac cctggatgag atcggcaaag tctacggtgt tactcgggag  
 420  
 cgcacccgcc ag  
 432

<210> 310  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 310  
 Gln Ala Arg Thr Ile Arg Ile Pro Val His Met Val Glu Val Ile Asn  
 1 5 10 15  
 Lys Leu Ala Arg Val Gln Arg Gln Met Leu Gln Asp Leu Gly Arg Glu

```

                20                25                30
Pro Thr Pro Glu Glu Leu Ala Asn Glu Leu Asp Met Thr Ala Glu Lys
      35                40                45
Val Ile Glu Val Gln Lys Tyr Gly Arg Glu Pro Ile Ser Leu His Thr
      50                55                60
Pro Leu Gly Glu Asp Gly Asp Ser Glu Phe Gly Asp Leu Ile Glu Asp
65      70      75      80
Ser Glu Ala Ile Val Pro Ala Asp Ala Val Asn Phe Thr Leu Leu Gln
      85                90                95
Glu Gln Leu His Asp Val Leu Asp Thr Leu Ser Glu Arg Glu Ala Gly
      100                105                110
Val Val Ser Met Arg Phe Gly Leu Thr Asp Gly Gln Pro Lys Thr Leu
      115                120                125
Asp Glu Ile Gly Lys Val Tyr Gly Val Thr Arg Glu Arg Ile Arg Gln
      130                135                140

```

<210> 311  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

```

<400> 311
acgcgtatcg aaaatatccc tcccattatt accgctcgcc ctgaactgat ggctcatgaa
60
ctgacgccag aatctcttga tgcgagcctg gaggggccg atgtggtggt cattggctct
120
ggactgggac aacaagcgtg gggcaaaaaa gcgctacaaa aggtcgagaa ttgtcgtaaa
180
ccgatgctgt gggatgccga cgcgcttaac cttctggcaa tcaatcctga taaacgtcac
240
aatcgcatcc tgacgccaca ccccggcgag gccgcgcggc tgcttagctg cagcgtcgca
300
gaaattgaaa acgatcgctt acttntctgc gcacgtctgg taaaacggta acccgagt
358

```

<210> 312  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

```

<400> 312
Thr Arg Ile Glu Asn Ile Pro Pro Ile Ile Thr Ala Arg Pro Glu Leu
1      5      10      15
Met Ala His Glu Leu Thr Pro Glu Ser Leu Asp Ala Ser Leu Glu Trp
      20      25      30
Ala Asp Val Val Val Ile Gly Pro Gly Leu Gly Gln Gln Ala Trp Gly
      35      40      45
Lys Lys Ala Leu Gln Lys Val Glu Asn Cys Arg Lys Pro Met Leu Trp
      50      55      60
Asp Ala Asp Ala Leu Asn Leu Leu Ala Ile Asn Pro Asp Lys Arg His
65      70      75      80
Asn Arg Ile Leu Thr Pro His Pro Gly Glu Ala Ala Arg Leu Leu Ser
      85      90      95
Cys Ser Val Ala Glu Ile Glu Asn Asp Arg Leu Leu Xaa Cys Ala Arg

```

100 105 110  
 Leu Val Lys Arg  
 115

<210> 313  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 313  
 ncaactgaaa gcattgagat gagcgacgtg ctgtccccct tccacccac caaggccaac  
 60  
 acccctggtg gcgaaccgcg caccatccgc acctcgaacg cgcacatcat tgccgtcacc  
 120  
 agtggc aaaag gcggcggtggg caagaccttt gtctccgcca acctggcgcg cgcgctgacc  
 180  
 cgccctgggac tgcgctgtgt ggtactggac gccgacctgg gcctggccaa cttggacgtg  
 240  
 gtgctgaacc tctaccccaa ggtgacgtg cagcatgtgt tcaccggcaa ggctcgtg  
 300  
 caagacgcgg tggtcacggc ccccgcgggc ttccatgtgc tgctagc  
 347

<210> 314  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 314  
 Xaa Thr Glu Ser Ile Glu Met Ser Asp Val Leu Ser Pro Phe His Pro  
 1 5 10 15  
 Thr Lys Ala Asn Thr Pro Gly Gly Glu Pro Arg Thr Ile Arg Thr Ser  
 20 25 30  
 Asn Ala His Ile Ile Ala Val Thr Ser Gly Lys Gly Gly Val Gly Lys  
 35 40 45  
 Thr Phe Val Ser Ala Asn Leu Ala Ala Leu Thr Arg Leu Gly Leu  
 50 55 60  
 Arg Val Leu Val Leu Asp Ala Asp Leu Gly Leu Ala Asn Leu Asp Val  
 65 70 75 80  
 Val Leu Asn Leu Tyr Pro Lys Val Thr Leu His Asp Val Phe Thr Gly  
 85 90 95  
 Lys Ala Ser Leu Gln Asp Ala Val Val Thr Ala Pro Gly Gly Phe His  
 100 105 110  
 Val Leu Leu  
 115

<210> 315  
 <211> 544  
 <212> DNA  
 <213> Homo sapiens

<400> 315  
 nnacgcgttc gtcaacagga aaacaacaac ggcttctcgc tggagggaac catgcttgcc  
 60

gaagatatct acgcgatcat gctgttttca tcgctcatcc tggtcgtccc ggggccatcc  
 120  
 aacaccttgc tgctcagcgc ccgtttccat ttccggctcg tcggggcggc gcccttcatc  
 180  
 ctgcttgagg cggtgggcta ctcgctatcc atttcggcat ggggctgggt attggcgcgc  
 240  
 ctgtccgaga gcaatccatg gatcatcagt ctgaccaagg cactctgcgc gctatatgtg  
 300  
 gcgcttctgg cgggaagac ctggaatgcc ntcgatccgc agtgcggggc cggtaaacttc  
 360  
 cgccatgggc ccctgcccct gtctgtggca accctgtcga acccgaaggc gctgatcttc  
 420  
 gccagcgtga tctttcccg caaggcgttc ctcgacttct ggaacaacta cacgatctcg  
 480  
 ctgctggcct tcctggttgt gctggcgccc atcgggatgc tttgggtcgg gctgggggcc  
 540  
 ggta  
 544

<210> 316  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 316  
 Ile Tyr Ala Ile Met Leu Phe Ser Ser Leu Ile Leu Val Val Pro Gly  
 1 5 10 15  
 Pro Ser Asn Thr Leu Leu Leu Ser Ala Arg Phe His Phe Gly Ser Leu  
 20 25 30  
 Arg Ala Ala Pro Phe Ile Leu Leu Glu Ala Leu Gly Tyr Ser Leu Ser  
 35 40 45  
 Ile Ser Ala Trp Gly Trp Val Leu Ala Arg Leu Ser Glu Ser Asn Pro  
 50 55 60  
 Trp Ile Ile Ser Leu Thr Lys Ala Leu Cys Ala Leu Tyr Val Ala Leu  
 65 70 75 80  
 Leu Ala Val Lys Thr Trp Asn Ala Xaa Asp Pro Gln Cys Gly Ala Gly  
 85 90 95  
 Asn Phe Arg His Gly Pro Leu Pro Leu Phe Val Ala Thr Leu Ser Asn  
 100 105 110  
 Pro Lys Ala Leu Ile Phe Ala Ser Val Ile Phe Pro Gly Lys Ala Phe  
 115 120 125  
 Leu Asp Phe Trp Asn Asn Tyr Thr Ile Ser Leu Leu Ala Phe Leu Val  
 130 135 140  
 Val Leu Ala Pro Ile Gly Met Leu Trp Val Gly Leu Gly Ala Gly  
 145 150 155

<210> 317  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

<400> 317  
 nggtcagcct ctcgcccagg caattctctt aagatacatg agctgctatg agtaccaaag  
 60

ccagaggttt gtccactgag agaagcacat tggaaagggg ggcgtgggcc tgggactgtg  
 120  
 tggcacttta tgcacggggg gggcctaagg gggnggtcc accaaccatg cactgngggg  
 180  
 ggggtgtggg taacatgccg tgcatttttg ggggtgtgcc tgagtggcac accatggggg  
 240  
 tggcatgtgg ggcattgtat catgtggtgt tggcgcagca aactcagctc ttacctggct  
 300  
 ggggccagcc tctaaaactt ctcacattgg gctcccttct gac  
 343

<210> 318

<211> 98

<212> PRT

<213> Homo sapiens

<400> 318

Met	Ser	Thr	Lys	Ala	Arg	Gly	Leu	Ser	Thr	Glu	Arg	Ser	Thr	Leu	Glu
1				5				10						15	
Arg	Gly	Ala	Trp	Ala	Trp	Asp	Cys	Val	Ala	Leu	Tyr	Ala	Arg	Gly	Gly
			20				25					30			
Pro	Lys	Gly	Gly	Gly	Pro	Pro	Thr	Met	His	Xaa	Gly	Trp	Gly	Val	Gly
		35				40					45				
Asn	Met	Pro	Cys	Ile	Leu	Gly	Val	Cys	His	Glu	Trp	His	Thr	Met	Gly
	50				55					60					
Val	Ala	Cys	Gly	Ala	Cys	Met	His	Val	Val	Leu	Ala	Gln	Gln	Thr	Gln
65				70				75						80	
Leu	Leu	Pro	Gly	Trp	Gly	Gln	Pro	Leu	Lys	Leu	Leu	Thr	Leu	Gly	Ser
			85				90							95	
Leu	Leu														

<210> 319

<211> 429

<212> DNA

<213> Homo sapiens

<400> 319

gaattctcga tgtaccccct cccggcagtc ctattctcga gctgagcggg cacagtggcc  
 60  
 ccgttaacag tgtggcttgg ggtccacca gccagagcac gttgcgaaat ggacctagta  
 120  
 agggcatgat atgtacagga ggcgacgatg ctcagtgcct cgtatatgat ctgactagct  
 180  
 caactcttcg aacagcatct gctcaaggac ggcgctctcg aaacagtcca tataaacaaa  
 240  
 gccattcacc gggaatagac ggatggcgtg tcggcgcaga agtgccggtg ctcgcttata  
 300  
 cggccccgtc tatggtcaac aatgctagct ggctcggcat gcctgcgcca tcaaaacgca  
 360  
 catcgctaca gagcaaacac cgcagccttt accgcagctt actcagttag tggactgagt  
 420  
 atacgtccn  
 429

<210> 320  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 320  
 Met Ile Cys Thr Gly Gly Asp Asp Ala Gln Cys Leu Val Tyr Asp Leu  
 1 5 10 15  
 Thr Ser Ser Thr Leu Arg Thr Ala Ser Ala Gln Gly Arg Arg Ser Arg  
 20 25 30  
 Asn Ser Pro Tyr Lys Gln Ser His Ser Pro Gly Ile Asp Gly Trp Arg  
 35 40 45  
 Val Gly Ala Glu Val Pro Val Leu Ala Tyr Thr Ala Pro Ser Met Val  
 50 55 60  
 Asn Asn Ala Ser Trp Leu Gly Met Pro Ala Pro Ser Lys Arg Thr Ser  
 65 70 75 80  
 Leu Gln Ser Lys His Arg Ser Leu Tyr Arg Ser Leu Leu Ser Glu Trp  
 85 90 95  
 Thr Glu Tyr Thr Ser  
 100

<210> 321  
 <211> 530  
 <212> DNA  
 <213> Homo sapiens

<400> 321  
 ngtgcacgac gtgctcgcca agtccctcgg gtcctctaata gcgatcaacg tgggttcacgc  
 60  
 caccgtcgat gcgttgacgc agctcgagga gcccggaagag gtcgcccgtc gccgcggcaa  
 120  
 gtccgttgag gagatcgccc cagcagccat gctgctgtcg cgcaaggagg ccgacgagggc  
 180  
 cgccgctgct gcccgcatgg aggaaaaggc ggggggtaac tgatgagcaa gctgaagatc  
 240  
 acccagatca agtctggcat cgctaccaag ccaaatacatc gtgagaccct gcgcagcctc  
 300  
 ggactgaagc gtattggtga caccggtcatc aaggaggacc gcccgaggtt ccgcggcatg  
 360  
 gtccggaccg ttcgtcacct cgtcaccatg gaagaggtgg actgacatgg ctattgagct  
 420  
 ccatgacctc aagcccgtc ctggtgcca caaggccaag acccgcggtg gtcgtggtga  
 480  
 gggttccaag ggtaagaccg ctggtcgcgg taccaagggc accggtgcac  
 530

<210> 322  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 322  
 Met Ser Lys Leu Lys Ile Thr Gln Ile Lys Ser Gly Ile Ala Thr Lys

1	5	10	15
Pro Asn His Arg Glu Thr Leu Arg Ser Leu Gly Leu Lys Arg Ile Gly			
20	25	30	
Asp Thr Val Ile Lys Glu Asp Arg Pro Glu Phe Arg Gly Met Val Arg			
35	40	45	
Thr Val Arg His Leu Val Thr Met Glu Glu Val Asp			
50	55	60	

<210> 323  
 <211> 468  
 <212> DNA  
 <213> Homo sapiens

<400> 323  
 ntccggaccc gctgtggcca cgtattctgc cgttcctgta ttgctaccag tctaaagaac  
 60  
 aacaagtgga cctgtcctta ttgccgggca tatcttcctt cagaaggagt tccagcaact  
 120  
 gatgtagcca aaagaatgaa atcagagtat aagaactgcg ctgagtgtga caccctgggt  
 180  
 tgcctcagtg aaatgagggc acatattcgg acttgtcaga agtacataga taagtatgga  
 240  
 ccactacaag aacttgagga gacagcagca aggtgtgtat gtcccttttg tcagagggaa  
 300  
 ctgtatgaag acagcttgct ggatcattgt attactcatc acagatcgga acggaggcct  
 360  
 gtgttctgtc cactttgcca tttaataccc gatgagaatc caagcagctt cagtggcagt  
 420  
 ttaataagac atctgcaagt tagtcacact ttggtttatg atgatttc  
 468

<210> 324  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<400> 324  
 Xaa Arg Thr Arg Cys Gly His Val Phe Cys Arg Ser Cys Ile Ala Thr  
 1 5 10 15  
 Ser Leu Lys Asn Asn Lys Trp Thr Cys Pro Tyr Cys Arg Ala Tyr Leu  
 20 25 30  
 Pro Ser Glu Gly Val Pro Ala Thr Asp Val Ala Lys Arg Met Lys Ser  
 35 40 45  
 Glu Tyr Lys Asn Cys Ala Glu Cys Asp Thr Leu Val Cys Leu Ser Glu  
 50 55 60  
 Met Arg Ala His Ile Arg Thr Cys Gln Lys Tyr Ile Asp Lys Tyr Gly  
 65 70 75 80  
 Pro Leu Gln Glu Leu Glu Glu Thr Ala Ala Arg Cys Val Cys Pro Phe  
 85 90 95  
 Cys Gln Arg Glu Leu Tyr Glu Asp Ser Leu Leu Asp His Cys Ile Thr  
 100 105 110  
 His His Arg Ser Glu Arg Arg Pro Val Phe Cys Pro Leu Cys His Leu  
 115 120 125  
 Ile Pro Asp Glu Asn Pro Ser Ser Phe Ser Gly Ser Leu Ile Arg His



130 135 140  
 Leu Gln Val Ser His Thr Leu Val Tyr Asp Asp Phe  
 145 150 155

<210> 325  
 <211> 374  
 <212> DNA  
 <213> Homo sapiens

<400> 325  
 acgcgtgaag ggaggacgag gaagtaacgg gaagcacaag gccgctgctg gggagatggc  
 60  
 actggagccc cctaggaagc atctcacagg ctgtggccct tggcacgggg atctggggcc  
 120  
 aggtcgagcg caggtctggg tatcatgcga gtgcgggctc gctggggcgg gaaagagttt  
 180  
 ggagctctgc tcccaggga tcccactcc cgcagatgac ttgcccgaga gagttctgct  
 240  
 ggtggatttt gatggaaatt ctatttgatc gcaccactt ggttcactgt gtgcttcgg  
 300  
 gtccccaggt tttaggtgct tcatgcctg ctgggaacga gacacgctcc tgccctcagt  
 360  
 gaatcttcag tcta  
 374

<210> 326  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 326  
 Met Lys His Leu Lys Pro Gly Asp Pro Glu Ala His Ser Glu Pro Ser  
 1 5 10 15  
 Gly Cys Asp Gln Ile Glu Phe Pro Ser Lys Ser Thr Ser Arg Thr Leu  
 20 25 30  
 Ser Gly Lys Ser Ser Ala Gly Val Gly Ile Pro Trp Glu Gln Ser Ser  
 35 40 45  
 Lys Leu Phe Pro Ala Pro Ala Ser Pro His Ser His Asp Thr Gln Thr  
 50 55 60  
 Cys Ala Arg Pro Gly Pro Arg Ser Pro Cys Gln Gly Pro Gln Pro Val  
 65 70 75 80  
 Arg Cys Phe Leu Gly Gly Ser Ser Ala Ile Ser Pro Ala Ala Ala Leu  
 85 90 95  
 Cys Phe Pro Leu Leu Pro Arg Pro Pro Phe Thr Arg  
 100 105

<210> 327  
 <211> 538  
 <212> DNA  
 <213> Homo sapiens

<400> 327  
 cactataaaa tccagtttgg ggcccgtggt ctttcctatt ggtctgtcag gtgaaaaact  
 60

ccggctgggg gaaaagcgtc cggtggtttg ttggtaaaga gggtagctga tgggctctgg  
 120  
 ggaatggagg atggcgacc ggctgtgggt ggactgtgga aacggggggg ggagtgccg  
 180  
 gggtagttgt cctgctggtc tggttttggg atcctgggct ggagaaatgc gatccaaaag  
 240  
 agctcgggat gggctcagag cgacccacga aaataccagg ggccaagtaa aatgaaccca  
 300  
 ccccttaaca gtgcacaaag cgctggcaca cgggccacgt ctggtagcgc aggctgccc  
 360  
 aagcgctcca accattttgc aaacctggga gagcaagagg ggctctgcag gtctagccgc  
 420  
 cgccccctgc ccactctggc cagccggagt ttttcaccta cagaccaata ggaaagaaca  
 480  
 cgggccccaa actggatttt atagtctgag ctctcagcat ctaaggaatg atatgcc  
 538

<210> 328

<211> 125

<212> PRT

<213> Homo sapiens

<400> 328

Met	Val	Gly	Ala	Leu	Arg	Ala	Ala	Cys	Val	Thr	Arg	Arg	Gly	Pro	Cys
1				5					10					15	
Ala	Ser	Ala	Leu	Cys	Thr	Val	Lys	Gly	Trp	Val	His	Phe	Thr	Trp	Pro
			20					25					30		
Leu	Val	Phe	Ser	Trp	Val	Ala	Leu	Ser	Pro	Ser	Arg	Ala	Leu	Leu	Asp
		35					40					45			
Arg	Ile	Ser	Pro	Ala	Gln	Asp	Pro	Lys	Thr	Arg	Pro	Ala	Gly	Gln	Leu
	50					55					60				
Pro	Arg	His	Cys	His	Pro	Pro	Phe	Pro	Gln	Ser	Thr	His	Ser	Arg	Cys
					70					75				80	
Ala	Ile	Leu	His	Ser	Pro	Glu	Pro	Ile	Thr	His	Pro	Leu	Tyr	Gln	Gln
				85					90					95	
Thr	Thr	Gly	Arg	Phe	Ser	Pro	Ser	Arg	Ser	Phe	Ser	Pro	Asp	Arg	Pro
			100					105					110		
Ile	Gly	Lys	Asn	Thr	Gly	Pro	Lys	Leu	Asp	Phe	Ile	Val			
		115					120					125			

<210> 329

<211> 407

<212> DNA

<213> Homo sapiens

<400> 329

tccggagagt tccctcccca ggaattcctt ctaagaatcc atgtggaaat agagcctgaa  
 60  
 gctcttcagt ctttctgctc cactgagcag tgttttcctg atacccttgg tatcctgcca  
 120  
 gcagcctcgt tatgactcct aactccattg ccctccatgg cccctgggag ctctctctct  
 180  
 cttctctctcc aggtagtaga'gcactgcttc tggcttcttg tgcacagaag ggtttccac  
 240

agctgagagc tgggctccta ctgacatagt tatttccttt atatectgcc ccaccttctt  
 300  
 ctggtagcac acagcaacct tgcatagttag ctggtatcat taccttccca atcaacaggc  
 360  
 cttgatttct tataggactt tttctctcag atttacattg cttcttt  
 407

<210> 330  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 330  
 Met Ile Pro Ala Thr Met Gln Gly Cys Cys Val Leu Pro Glu Glu Gly  
 1 5 10 15  
 Gly Ala Gly Tyr Lys Gly Asn Asn Tyr Val Ser Arg Ser Pro Ala Leu  
 20 25 30  
 Ser Cys Gly Lys Pro Phe Cys Ala Gln Glu Ala Arg Ser Ser Ala Leu  
 35 40 45  
 Leu Pro Gly Glu Lys Glu Arg Glu Ser Ala Gln Gly Pro Trp Arg Ala  
 50 55 60  
 Met Glu Leu Gly Val Ile Thr Arg Leu Leu Ala Gly Tyr Gln Gly Tyr  
 65 70 75 80  
 Gln Glu Asn Thr Ala Gln Trp Ser Arg Lys Thr Glu Glu Leu Gln Ala  
 85 90 95  
 Leu Phe Pro His Gly Phe Leu Glu Gly Ile Pro Gly Glu Gly Thr Leu  
 100 105 110  
 Arg

<210> 331  
 <211> 523  
 <212> DNA  
 <213> Homo sapiens

<400> 331  
 tgtaccgaac ctgctggtct cgagggcctt gctgggctcg tcgtacgcac agctgacgaa  
 60  
 tccaccggcc cccatcccgg cgccactttc gctgaggcca tggagtcgat cggagccagc  
 120  
 tacgacggat cggccggggt ggccggaagt cacgtcggcg tcgatgtgcc cgtgacaagg  
 180  
 ttcgacgcag cggtgaact cttcgtcgaa ttgttgaaca ccacgagcct ggttgaagag  
 240  
 gacatcgccc gtcagatcga cgcggcgcga gcctccctgg cccagaccag ccagcgcgga  
 300  
 tcggccctag ccgagatggc agcagcacgt gcgctatggc cagtggggtc acggtcgtcc  
 360  
 ctgcccacga tcggtaccct ctcgtcgggtg gaaaagetca acgccgcagc cgcacgagaa  
 420  
 ttctggggccg cgcactggac gatctccgat gccgtgctgg tggttgccgg agagggagtc  
 480  
 gaggacctcg acttgtcaat attcaaggag tggacgacca gct  
 523

<210> 332  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 332  
 Cys Thr Glu Pro Ala Gly Leu Glu Gly Leu Ala Gly Leu Val Val Arg  
 1 5 10 15  
 Thr Ala Asp Glu Ser Thr Gly Pro His Pro Gly Ala Thr Phe Ala Glu  
 20 25 30  
 Ala Met Glu Ser Ile Gly Ala Ser Tyr Asp Gly Ser Ala Gly Leu Ala  
 35 40 45  
 Gly Ser His Val Gly Val Asp Val Pro Val Thr Arg Phe Asp Ala Ala  
 50 55 60  
 Ala Glu Leu Phe Val Glu Leu Leu Asn Thr Thr Ser Leu Val Glu Glu  
 65 70 75 80  
 Asp Ile Ala Arg Gln Ile Asp Ala Ala Arg Ala Ser Leu Ala Gln Thr  
 85 90 95  
 Ser Gln Arg Gly Ser Ala Leu Ala Glu Met Ala Ala Ala Arg Ala Leu  
 100 105 110  
 Trp Pro Val Gly Ser Arg Ser Ser Leu Pro Thr Ile Gly Thr Leu Ser  
 115 120 125  
 Ser Val Glu Lys Leu Asn Ala Ala Ala Arg Glu Phe Trp Ala Ala  
 130 135 140  
 His Trp Thr Ile Ser Asp Ala Val Leu Val Val Ala Gly Glu Gly Val  
 145 150 155 160  
 Glu Asp Leu Asp Leu Ser Ile Phe Lys Glu Trp Thr Thr Ser  
 165 170

<210> 333  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

<400> 333  
 nntgttcgtc gtgtcgaccc ggaactcaag gcccgaggca tgacgggtgaa ggtgccaacc  
 60  
 gatccccatc accgcccggg agttccattg aagtctgcga aggaccgtat ggacatcatt  
 120  
 tctgcttacc gagaactcgg aagctatcgc gccgcagccg aggtgtgcgg caccaccac  
 180  
 aagaccgtca agcgggtggt cgatcggttt gaagccggcg atccaccac cggtggcaag  
 240  
 gaacggggccc gcaactacga tgcggtggcc cagctcgtcg cgcagcgagt cgcgcggtca  
 300  
 cacggccgga tcaactgcaa acggctgcta ccggtagcgc gagcggcagg atatgagggg  
 360  
 tcggcgcgga at  
 372

<210> 334  
 <211> 88  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 334

```

Met Asp Ile Ile Ser Ala Tyr Arg Glu Leu Gly Ser Tyr Arg Ala Ala
 1           5           10           15
Ala Glu Val Cys Gly Thr Thr His Lys Thr Val Lys Arg Val Val Asp
           20           25           30
Arg Phe Glu Ala Gly Asp Pro Pro Thr Gly Gly Lys Glu Arg Ala Arg
           35           40           45
Asn Tyr Asp Ala Val Ala Gln Leu Val Ala Gln Arg Val Ala Arg Ser
           50           55           60
His Gly Arg Ile Thr Ala Lys Arg Leu Leu Pro Val Ala Arg Ala Ala
65           70           75           80
Gly Tyr Glu Gly Ser Ala Arg Asn

```

85

&lt;210&gt; 335

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 335

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gtgcacgcct tgctgggcca gggcgatgag cctgcgcgca ccttcgtgga cggtagcttt
60
ggcaggggag ggcattcgag gctcatcctg cagcgggttg ggccgcaagg ccgctggtg
120
gcgttcgaca aggacaccga agccattcaa gcagcggcgc gcatcacgga tgcgcgcttt
180
tccatcnggc accaggggtt cagccatctc ggggaactgc ccgccgccag cgtgtccggt
240
gtgctgctgg acctgggcgt gagctccccg cagatcgacg acccccagcg cgggttcagt
300
tttcgtttcg atgggtccgt ggacatgcgc atggacacca ctccgatgca tggatg
356

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&lt;210&gt; 336

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 336

```

Val His Ala Leu Leu Gly Glu Gly Asp Ala Pro Ala Arg Thr Phe Val
 1           5           10           15
Asp Gly Thr Phe Gly Arg Gly Gly His Ser Arg Leu Ile Leu Gln Arg
           20           25           30
Leu Gly Pro Gln Gly Arg Leu Val Ala Phe Asp Lys Asp Thr Glu Ala
           35           40           45
Ile Gln Ala Ala Ala Arg Ile Thr Asp Ala Arg Phe Ser Ile Xaa His
           50           55           60
Gln Gly Phe Ser His Leu Gly Glu Leu Pro Ala Ala Ser Val Ser Gly
65           70           75           80
Val Leu Leu Asp Leu Gly Val Ser Ser Pro Gln Ile Asp Asp Pro Gln
           85           90           95
Arg Gly Phe Ser Phe Arg Phe Asp Gly Pro Leu Asp Met Arg Met Asp

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100  
Thr Thr Pro Met His Gly  
115

105

110

<210> 337  
<211> 447  
<212> DNA  
<213> Homo sapiens

<400> 337  
cagcctctct ccgaccgcgc cgggtgtgaag cacgggcatg ccggtgtgca agtggcacca  
60  
cagccaaaac agcgagctca cacttcaaac tccttcaaag accccaggcc tctgtaagaa  
120  
ccgctcatct ctgtgcccac agtccccccg cttccatgtg acccagaaat ggaaccacgc  
180  
agcagaggcg gggatcacag gtgaagcagc tgtgaacatt tgcttcaggc ttctgtgcaa  
240  
acaggcgcca tcatgtcagc cgggtgagcag gagcaacgtg cgtgggtcag ggggtggcca  
300  
cacgtccaac ttataagaa atgacagatt ccctgatggc catagggatc tgcagggcca  
360  
gcagcaggca taggacttcc ggtggccctg cgtcttcac c aacactgagt attgtcaggg  
420  
tttctgtact gtttttacag ccaattg  
447

<210> 338  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 338  
Met Pro Val Cys Lys Trp His His Ser Gln Asn Ser Glu Leu Thr Leu  
1 5 10 15  
Gln Thr Pro Ser Lys Thr Pro Gly Leu Cys Lys Asn Arg Ser Ser Leu  
20 25 30  
Cys Pro Gln Leu Pro Arg Phe His Val Thr Gln Lys Trp Asn His Ala  
35 40 45  
Ala Glu Ala Gly Ile Thr Gly Glu Ala Ala Val Asn Ile Cys Phe Arg  
50 55 60  
Leu Leu Cys Lys Gln Ala Pro Ser Cys Gln Pro Val Ser Arg Ser Asn  
65 70 75 80  
Val Arg Gly Ser Gly Gly Gly His Thr Ser Asn Phe Ile Arg Asn Asp  
85 90 95  
Arg Phe Pro Asp Gly His Arg Asp Leu Gln Gly Gln Gln Ala  
100 105 110

<210> 339  
<211> 588  
<212> DNA  
<213> Homo sapiens

<400> 339

tctagaatga agcgctgtat cctagcaccg gcagacgtac caagactatc aagggcgctca  
 60  
 gatcgtttat cctgcagttg ccattcatca gacaaatcca gtggaacca atggaagaca  
 120  
 ccgacctgca agcgctgatg gccagactcg aattgctaata tgatcgggtc gagcaactta  
 180  
 agagtcaaaa cggactccta ttagctcagg aaaagacctg ggcgcganaa cgcgctcacc  
 240  
 tcattgaaaa aaacgaaatc gcccggcgta aggtcgaatc gatgatttcg cgctgaagg  
 300  
 ccttgagca agactatgag ttaagcaata gcgttacgtg cagatcctcg acaagaata  
 360  
 ttgatcatc tgccccagg aagaacgcag cacctggtga gtgctgccg ctacctggaa  
 420  
 ggcaaaaagg cgtgaaatcc gcagcagcgg caaagtcacg ggtgccgacc gcacgcgcg  
 480  
 gatggccgcg ctgaacatca cccacgatct gctgcataag caggaacggc ctgacgttca  
 540  
 ggccagcggc tcaacgcgag agcaagtgcg tgacctgctg gaacgcgt  
 588

<210> 340  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 340  
 Met Glu Asp Thr Asp Leu Gln Ala Leu Met Ala Arg Leu Glu Leu Leu  
 1 5 10 15  
 Ile Asp Arg Val Glu Gln Leu Lys Ser Gln Asn Gly Leu Leu Leu Ala  
 20 25 30  
 Gln Glu Lys Thr Trp Ala Arg Xaa Arg Ala His Leu Ile Glu Lys Asn  
 35 40 45  
 Glu Ile Ala Arg Arg Lys Val Glu Ser Met Ile Ser Arg Leu Lys Ala  
 50 55 60  
 Leu Glu Gln Asp Tyr Glu Leu Ser Asn Ser Val Thr Cys Arg Ser Ser  
 65 70 75 80  
 Thr Lys Asn Ile Arg Ser Ser Ala Pro Arg Lys Asn Ala Ala Pro Gly  
 85 90 95  
 Glu Cys Cys Pro Leu Pro Gly Arg Pro Lys Gly Val Lys Ser Ala Ala  
 100 105 110  
 Ala Ala Lys Ser Ser Val Pro Thr Ala Ser Pro  
 115 120

<210> 341  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 341  
 ngccgcgcgg cctacctgct gtacctggcc tatgccacct ggcgtgaccg ctccggccttt  
 60  
 gcaatgaacg acacgccgac agttgcgacc gcgcgcagcc tgatcctgcg tggcttcttg  
 120

ctgaacattc ttaaccccaa gctgacaatt ttcttctctgg ccttctctgcc tcaattcgta  
 180  
 acgccaggcg gcaccgcgcc ggccttgacg atgctgggtac tgagcggcgt gttcatggcg  
 240  
 atgacgcttg cagtgtttgt gctgtatggc ctgttggcga atgtgtttcg tcgtgcagtg  
 300  
 gtcgagtcgc cacgtgtgca gaactggctg cgacgcagtt ttgccacggc ctttgccggg  
 360  
 ctgggggttg acctggcggt tgcgcagcgc tgaggacgcg t  
 401

<210> 342

<211> 130

<212> PRT

<213> Homo sapiens

<400> 342

Xaa	Arg	Ala	Ala	Tyr	Leu	Leu	Tyr	Leu	Ala	Tyr	Ala	Thr	Trp	Arg	Asp
1				5					10					15	
Arg	Ser	Ala	Phe	Ala	Met	Asn	Asp	Thr	Pro	Thr	Val	Ala	Thr	Ala	Arg
			20					25					30		
Ser	Leu	Ile	Leu	Arg	Gly	Phe	Leu	Leu	Asn	Ile	Leu	Asn	Pro	Lys	Leu
		35					40					45			
Thr	Ile	Phe	Phe	Leu	Ala	Phe	Leu	Pro	Gln	Phe	Val	Thr	Pro	Gly	Gly
	50					55					60				
Thr	Ala	Pro	Ala	Leu	Gln	Met	Leu	Val	Leu	Ser	Gly	Val	Phe	Met	Ala
65					70					75				80	
Met	Thr	Leu	Ala	Val	Phe	Val	Leu	Tyr	Gly	Leu	Leu	Ala	Asn	Val	Phe
			85						90				95		
Arg	Arg	Ala	Val	Val	Glu	Ser	Pro	Arg	Val	Gln	Asn	Trp	Leu	Arg	Arg
		100						105					110		
Ser	Phe	Ala	Thr	Ala	Phe	Ala	Gly	Leu	Gly	Leu	Asn	Leu	Ala	Phe	Ala
		115					120					125			
Gln	Arg														
130															

<210> 343

<211> 389

<212> DNA

<213> Homo sapiens

<400> 343

gtgttgcgca actacatggc gtccctgccg ttcagcgtgg tcgagtcggc gcgcatcgac  
 60  
 ggggtgctcca acttccagat cttctggaag ctgatcgccc cgatggcgat gccggcgatg  
 120  
 gcggcggttcg cgaccctgca gttcctgtgg gtgtggaacg acctgctcat cgccaagctc  
 180  
 ttcttcacca acgacaaccc cacggtgatc gtcaagctcc aacagctttc cnnngggcccc  
 240  
 aaggcccagg gtgcggagct gctgacggcg ggcgccttca tctccatcgt gctacccatg  
 300  
 atcgtcttct tcgtgctcca gaacttctct gtgcgcggta tgacgtcggg tgccgtcaag  
 360



gggtgaccgc tcaactgcag tggcccggg  
389

<210> 344  
<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 344  
Val Leu Arg Asn Tyr Met Ala Ser Leu Pro Phe Ser Val Val Glu Ser  
1 5 10 15  
Ala Arg Ile Asp Gly Cys Ser Asn Phe Gln Ile Phe Trp Lys Leu Ile  
20 25 30  
Ala Pro Met Ala Met Pro Ala Met Ala Ala Phe Ala Thr Leu Gln Phe  
35 40 45  
Leu Trp Val Trp Asn Asp Leu Leu Ile Ala Lys Leu Phe Leu Thr Asn  
50 55 60  
Asp Asn Pro Thr Val Ile Val Lys Leu Gln Gln Leu Ser Xaa Gly Pro  
65 70 75 80  
Lys Ala Gln Gly Ala Glu Leu Leu Thr Ala Gly Ala Phe Ile Ser Ile  
85 90 95  
Val Leu Pro Met Ile Val Phe Phe Val Leu Gln Asn Phe Leu Val Arg  
100 105 110  
Gly Met Thr Ser Gly Ala Val Lys Gly  
115 120

<210> 345  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 345  
ctagtacttt atgctgatgg tgaacgtcgt tacatccttg cccctaaagg catgggttgct  
60  
ggatgatgtga tccaatctgg tgaagatgca tcaattaaag taggtaactg cttaccgatg  
120  
cgtaatatcc cagttgggtac aacagtagac gctgtagaaa tgaaacctgc taaaggtgca  
180  
caaattgcac gttctgctgg ttcttacagc caaattatag ctctgatgg tgcttacgtt  
240  
actctacgtt tacgtagtgg tgaaatgcgt aaaatccctg ctgagtgtcg tgcaacaatc  
300  
ggatgaagttg gtaatgcaga acatattgcta cgtcaactag gtaaagctgg tgctacgcgt  
360

<210> 346  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 346  
Leu Val Leu Tyr Ala Asp Gly Glu Arg Arg Tyr Ile Leu Ala Pro Lys  
1 5 10 15  
Gly Met Val Ala Gly Asp Val Ile Gln Ser Gly Glu Asp Ala Ser Ile

			20					25					30		
Lys	Val	Gly	Asn	Cys	Leu	Pro	Met	Arg	Asn	Ile	Pro	Val	Gly	Thr	Thr
		35					40					45			
Val	His	Ala	Val	Glu	Met	Lys	Pro	Ala	Lys	Gly	Ala	Gln	Ile	Ala	Arg
	50					55					60				
Ser	Ala	Gly	Ser	Tyr	Ser	Gln	Ile	Ile	Ala	Arg	Asp	Gly	Ala	Tyr	Val
65					70					75					80
Thr	Leu	Arg	Leu	Arg	Ser	Gly	Glu	Met	Arg	Lys	Ile	Pro	Ala	Glu	Cys
				85				90						95	
Arg	Ala	Thr	Ile	Gly	Glu	Val	Gly	Asn	Ala	Glu	His	Met	Leu	Arg	Gln
			100					105					110		
Leu	Gly	Lys	Ala	Gly	Ala	Thr	Arg								
		115					120								

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<210> 347
<211> 565
<212> DNA
<213> Homo sapiens
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<400> 347
accggtgatg ccaaaggtgc tgtgacaagg ggattcatcg gttcggggcaa ggtcgtcacg
60
gcagctgccg tcatcatgat ttcgggtgttc gtcttcttca tccccgaggg catgaacgcc
120
atcaaggaaa tcgccttggc cctggccgtc gggatcctca cggatgcctt cttggtgctg
180
atgaccctcg tcccggccgt gatggccctg ctaggtgaca aggcattggtg gttgcccggg
240
tggctggatc gacgcctacc ccgcctcgac atcgagggag aagggatcac ccacgaggaa
300
aagctggccg cctggccca acgcggatcac accgaggccc tgcacgccga ggggatcggg
360
gtggaggggc tcttcgaagg cctcgatctg cacgtcgaac cgcgtcaggt gcaagccgtc
420
gtcggatcgc agaacagtgt ctcgccgtc ctgctggcga tggggggacg gctgcccttg
480
gatcacggcc ggatgaggtc gggaggattg ctgctaccgc agcgggcttc cagagtgcgt
540
cgggtgacgt ggttcctcga cgcgt
565

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<210> 348
<211> 188
<212> PRT
<213> Homo sapiens
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<400> 348

Thr	Gly	Asp	Ala	Lys	Gly	Ala	Val	Thr	Arg	Gly	Phe	Ile	Gly	Ser	Gly
1				5					10					15	
Lys	Val	Val	Thr	Ala	Ala	Ala	Val	Ile	Met	Ile	Ser	Val	Phe	Val	Phe
			20					25					30		
Phe	Ile	Pro	Glu	Gly	Met	Asn	Ala	Ile	Lys	Glu	Ile	Ala	Leu	Ala	Leu
		35					40					45			
Ala	Val	Gly	Ile	Leu	Thr	Asp	Ala	Phe	Leu	Val	Arg	Met	Thr	Leu	Val

50		55		60											
Pro	Ala	Val	Met	Ala	Leu	Leu	Gly	Asp	Lys	Ala	Trp	Trp	Leu	Pro	Gly
65				70				75						80	
Trp	Leu	Asp	Arg	Arg	Leu	Pro	Arg	Leu	Asp	Ile	Glu	Gly	Glu	Gly	Ile
			85					90						95	
Thr	His	Glu	Glu	Lys	Leu	Ala	Ala	Trp	Pro	Thr	Ala	Asp	His	Thr	Glu
			100					105					110		
Ala	Leu	His	Ala	Glu	Gly	Ile	Gly	Val	Glu	Gly	Leu	Phe	Glu	Gly	Leu
		115					120					125			
Asp	Leu	His	Val	Glu	Pro	Arg	Gln	Val	Gln	Ala	Val	Val	Gly	Ser	Gln
	130					135				140					
Asn	Ser	Val	Ser	Ala	Val	Leu	Leu	Ala	Ile	Gly	Gly	Arg	Leu	Pro	Leu
145					150				155					160	
Asp	His	Gly	Arg	Met	Arg	Ser	Gly	Gly	Leu	Leu	Leu	Pro	Glu	Arg	Ala
			165					170						175	
Ser	Arg	Val	Arg	Arg	Val	Thr	Trp	Phe	Leu	Asp	Ala				
			180					185							

&lt;210&gt; 349

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 349

```

ntgctggcca cggataatga ccgtactctg cgtgatgtcg ttgccgctga ccctacccat
60
gagctcgggt cggctaccgc tcatacgttt gcggacaatt tgccgttcct tcttaaactg
120
ctcgcggcag aagagccact atcgttgcag gctcatccca gtttggcgca agcacaggaa
180
gggtacgggc gggagaatcg caaaggggtg ccattagatg cccagaccg gaattaccac
240
gatcccaacc ataaaccgga gcttattggt gggctgacgc gattccacgc actagccggc
300
ttcctgaac cacaacgcac acttgagctt tttgacgcg
339

```

&lt;210&gt; 350

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 350

Xaa	Leu	Ala	Thr	Asp	Asn	Asp	Arg	Thr	Leu	Arg	Asp	Val	Val	Ala	Ala
1				5				10						15	
Asp	Pro	Thr	His	Glu	Leu	Gly	Ser	Ala	Thr	Ala	His	Thr	Phe	Ala	Asp
			20				25					30			
Asn	Leu	Pro	Phe	Leu	Leu	Lys	Leu	Leu	Ala	Ala	Glu	Glu	Pro	Leu	Ser
		35				40						45			
Leu	Gln	Ala	His	Pro	Ser	Leu	Ala	Gln	Ala	Gln	Glu	Gly	Tyr	Gly	Arg
	50				55					60					
Glu	Asn	Arg	Lys	Gly	Val	Pro	Leu	Asp	Ala	Pro	Asp	Arg	Asn	Tyr	His
65				70				75						80	
Asp	Pro	Asn	His	Lys	Pro	Glu	Leu	Ile	Val	Gly	Leu	Thr	Arg	Phe	His

	85		90		95										
Ala	Leu	Ala	Gly	Phe	Arg	Glu	Pro	Gln	Arg	Thr	Leu	Glu	Leu	Phe	Asp
	100							105					110		
Ala															

&lt;210&gt; 351

&lt;211&gt; 354

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 351

gcgcgccccca gtgccgagac ccggggcttc aggagccggc cccgggagag aagagtgcgg  
60  
cggcggacgg agaaaacaac tccaaagttg gcgaaaggca ccgcccctac tcccgggctg  
120  
ccgcgccttc cccgccccca gccctggcat ccagagtacg ggctcgagccc gnggccatgg  
180  
agccccctg gggaggcggc accagggagc ctgggccccg gggctccgcc gcgaccccat  
240  
cgggtagacc acagaagctc cgggaccctt ccggcacctc tggacagccc aggatgctgt  
300  
tggccaccn ntcctcctcc tcctccttgg aggcgctctg gcccatccag accg  
354

&lt;210&gt; 352

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 352

Ala	Arg	Pro	Ser	Ala	Glu	Thr	Arg	Gly	Phe	Arg	Ser	Arg	Pro	Arg	Glu
1				5				10						15	
Arg	Arg	Val	Arg	Arg	Arg	Thr	Glu	Lys	Thr	Thr	Pro	Lys	Leu	Ala	Lys
			20					25					30		
Gly	Thr	Ala	Pro	Thr	Pro	Gly	Leu	Pro	Pro	Pro	Pro	Arg	Pro	Gln	Pro
			35				40					45			
Trp	His	Pro	Glu	Tyr	Gly	Ser	Ser	Pro	Xaa	Pro	Trp	Ser	Pro	Pro	Gly
	50					55					60				
Glu	Ala	Ala	Pro	Gly	Ser	Leu	Gly	Pro	Gly	Ala	Pro	Pro	Arg	Pro	His
65					70				75					80	
Arg	Val	Asp	His	Arg	Ser	Ser	Gly	Thr	Leu	Pro	Ala	Pro	Leu	Asp	Ser
				85				90					95		
Pro	Gly	Cys	Cys	Trp	Pro	Pro	Xaa	Pro	Pro	Pro	Pro	Pro	Trp	Arg	Arg
		100					105						110		
Ser	Gly	Pro	Ser	Arg	Pro										
															115

&lt;210&gt; 353

&lt;211&gt; 1469

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 353

nntcatgaag gcttgaactt gcgtgatctt cagcctgcgg acctggcggg tgacggcggt  
60  
attgagccgg tggacctcgt ggtcggagat gtctctttta tctccttgac gatgatcctt  
120  
gaaccatttt cagctgttgt cagcccacac ggccctcatgc tgttgctggg gaagcctcaa  
180  
tttgaggttg gttgcaaggc tttgggagcc catggcggtg tcacggaccc ggccctgcgc  
240  
ttgcaggcca tcgcgggtgt catggcagca gcggtagatt tgggttggcg tatgctgac  
300  
gagtgcgata gcccgttgcc cgggcaggat ggaaacgttg agcacttcgt cttgctggaa  
360  
cgtacgggtc ggtgacagac gtccgggcat atcatgggccc gctactgtgg tcttgtgaac  
420  
gacacgagcc cttcgagata cgttgtcgtc gtcacccatg ccacgcggga cgacgctttt  
480  
gacgcggctg ccgaattcat ctctgaaatg gcggggcgag acattgggtg cgcggttccg  
540  
gatgatcagg tgaagccgat gtcaagcaag ctgccaggga tcgatcttga aagcttggga  
600  
gagttcgccc acgaggcgga ggtggtcgtc gtctttggcg gcgacggcac gatcttgca  
660  
gctgctgaat ggtcattacc tcgccacgtt cccatgattg gcgtcaacct tggccatgtc  
720  
ggttttctgg ctgagctgga gcgctccgat atggcggtac tagtgaacaa ggtgtgttcg  
780  
cgcgactaca ccgttgagga tcgcctcgtg cttaaaacca ccgtcaccga gcattccgga  
840  
caacaccgtt ggagttcttt tgccgtcaac gagttgtctc tggaaaaggc agcccgcgcg  
900  
cgcattgctg acgttctggc gtctgtcgac gagttgccgg tgcaacgctg gagttgcgac  
960  
gggatcctgg tctcgacccc gaccggatcg acggcctacg cgttctcagc tggcgggccc  
1020  
gtcatgtggc ccgatctcga cgccatgctc atgggtgccg tgagcgctca cgctctcttt  
1080  
gtcgcaccgc tggatcatgag ccagctgct cgagtggaac ttgacatcca gccagacggt  
1140  
tcagaatcgg cggttctgtg gtgcgacggg cgccgatcgt gcaccgtacg accgggggaa  
1200  
agaatcacgg tcgtccgcca tcccgaaccg ctgcgcattg ctcgtctggc cgcgacgccc  
1260  
ttcacatcgc gtctgggtcaa gaagtttgag ctcccggta gcgggtggcg tcagggtcgt  
1320  
gaccgtcatc acctagagga gacttcgtga tacgtagtgt gcgaattcgt ggactcggcg  
1380  
tcatcgatga gacggtcctc gaaccctcat ccgcgctgac ggagtcacc ggcgagaccg  
1440  
gcgccgaaa gaccatggtg gtcaccggt  
1469

&lt;210&gt; 354

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 354

```

Met Gly Arg Tyr Cys Gly Leu Val Asn Asp Thr Ser Pro Ser Arg Tyr
 1           5           10           15
Val Val Val Val Thr His Ala Thr Arg Asp Asp Ala Phe Asp Ala Ala
 20           25           30
Ala Glu Phe Ile Ser Glu Met Ala Gly Arg Asp Ile Gly Cys Ala Val
 35           40           45
Pro Asp Asp Gln Val Lys Pro Met Ser Ser Lys Leu Pro Gly Ile Asp
 50           55           60
Leu Glu Ser Leu Gly Glu Phe Ala His Glu Ala Glu Val Val Val Val
 65           70           75           80
Phe Gly Gly Asp Gly Thr Ile Leu Arg Ala Ala Glu Trp Ser Leu Pro
 85           90           95
Arg His Val Pro Met Ile Gly Val Asn Leu Gly His Val Gly Phe Leu
 100          105          110
Ala Glu Leu Glu Arg Ser Asp Met Ala Asp Leu Val Asn Lys Val Cys
 115          120          125
Ser Arg Asp Tyr Thr Val Glu Asp Arg Leu Val Leu Lys Thr Thr Val
 130          135          140
Thr Glu His Ser Gly Gln His Arg Trp Ser Ser Phe Ala Val Asn Glu
 145          150          155          160
Leu Ser Leu Glu Lys Ala Ala Arg Arg Arg Met Leu Asp Val Leu Ala
 165          170          175
Ser Val Asp Glu Leu Pro Val Gln Arg Trp Ser Cys Asp Gly Ile Leu
 180          185          190
Val Ser Thr Pro Thr Gly Ser Thr Ala Tyr Ala Phe Ser Ala Gly Gly
 195          200          205
Pro Val Met Trp Pro Asp Leu Asp Ala Met Leu Met Val Pro Leu Ser
 210          215          220
Ala His Ala Leu Phe Ala Arg Pro Leu Val Met Ser Pro Ala Ala Arg
 225          230          235          240
Val Asp Leu Asp Ile Gln Pro Asp Gly Ser Glu Ser Ala Val Leu Trp
 245          250          255
Cys Asp Gly Arg Arg Ser Cys Thr Val Arg Pro Gly Glu Arg Ile Thr
 260          265          270
Val Val Arg His Pro Asp Arg Leu Arg Ile Ala Arg Leu Ala Ala Gln
 275          280          285
Pro Phe Thr Ser Arg Leu Val Lys Lys Phe Glu Leu Pro Val Ser Gly
 290          295          300
Trp Arg Gln Gly Arg Asp Arg His His Leu Glu Glu Thr Ser
 305          310          315

```

&lt;210&gt; 355

&lt;211&gt; 558

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 355

```

nggatccac ctcttggaat ggaaaccac ataccagttc tcttctcga ttgaaatgcg
60
gatgacctca gtgccaatga gcagcttggt ggcccccatg catccggcgt gaactccatc
120

```

ctgcccagg agcatggcag ccagtttttc tacctgcca tcataaagca cagtgatgat  
 180  
 gaggtttcag ccacagcctc ttgggattcc tcggtgcatg attctgttca cttgaatggg  
 240  
 gtcacaccac agaatgaaag gatttaccta attgtgaaaa ccacagttca actcagccac  
 300  
 cctgctgcta tggagttagt attacgaaaa cgaattgcag ccaatattta caacaaacag  
 360  
 agtttcacgc agagtttgaa gaggagaata tccctgaaaa atatatttta ttctgtggg  
 420  
 gtaacctatg aaatagtatc caatatacca aaggcaactg aggagataga ggaccgggaa  
 480  
 acgctggctc tcctggcagc aaggagtga aacgaaggca catcagatgg gaagacgtac  
 540  
 attgagaagt acactcga  
 558

<210> 356

<211> 186

<212> PRT

<213> Homo sapiens

<400> 356

Xaa	Ile	Pro	Pro	Pro	Gly	Met	Glu	Thr	His	Ile	Pro	Val	Leu	Phe	Leu
1				5					10					15	
Asp	Leu	Asn	Ala	Asp	Asp	Leu	Ser	Ala	Asn	Glu	Gln	Leu	Val	Gly	Pro
		20						25					30		
His	Ala	Ser	Gly	Val	Asn	Ser	Ile	Leu	Pro	Lys	Glu	His	Gly	Ser	Gln
		35					40					45			
Phe	Phe	Tyr	Leu	Pro	Ile	Ile	Lys	His	Ser	Asp	Asp	Glu	Val	Ser	Ala
	50					55					60				
Thr	Ala	Ser	Trp	Asp	Ser	Ser	Val	His	Asp	Ser	Val	His	Leu	Asn	Gly
65					70					75				80	
Val	Thr	Pro	Gln	Asn	Glu	Arg	Ile	Tyr	Leu	Ile	Val	Lys	Thr	Thr	Val
				85					90					95	
Gln	Leu	Ser	His	Pro	Ala	Ala	Met	Glu	Leu	Val	Leu	Arg	Lys	Arg	Ile
			100					105					110		
Ala	Ala	Asn	Ile	Tyr	Asn	Lys	Gln	Ser	Phe	Thr	Gln	Ser	Leu	Lys	Arg
		115					120					125			
Arg	Ile	Ser	Leu	Lys	Asn	Ile	Phe	Tyr	Ser	Cys	Gly	Val	Thr	Tyr	Glu
	130					135					140				
Ile	Val	Ser	Asn	Ile	Pro	Lys	Ala	Thr	Glu	Glu	Ile	Glu	Asp	Arg	Glu
145					150					155				160	
Thr	Leu	Ala	Leu	Leu	Ala	Ala	Arg	Ser	Glu	Asn	Glu	Gly	Thr	Ser	Asp
				165					170					175	
Gly	Lys	Thr	Tyr	Ile	Glu	Lys	Tyr	Thr	Arg						
			180					185							

<210> 357

<211> 323

<212> DNA

<213> Homo sapiens

<400> 357

acgcgtgcgt gtgttgtgtg agtcgggtgt gtgcatgcgt gtgggtgtgc agcaggtggg  
 60  
 gtacgatcag gctgaaggct gatcaggcac aaggctctgg gggagagccc tggttccagc  
 120  
 cctgggggtca gagcagcagg ggccagaaag acggcagggg tgagcactgc acccgctggg  
 180  
 cagggcaggg ccacagaagg cagggcatgg aggccacgtg aagggttga cagagtggat  
 240  
 ggatgtctcc ggaagcacct gcgtggccca gtcagcagga tcagactcgc atgtgtcagg  
 300  
 gtcaccatgg gtcagcgagg atn  
 323

<210> 358  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 358  
 Met Val Thr Leu Thr His Ala Ser Leu Ile Leu Leu Thr Gly Pro Arg  
 1 5 10 15  
 Arg Cys Phe Arg Arg His Pro Ser Thr Leu Ser Ser Pro Ser Arg Gly  
 20 25 30  
 Leu His Ala Leu Pro Ser Val Ala Leu Pro Cys Pro Ala Gly Ala Val  
 35 40 45  
 Leu Thr Pro Ala Val Phe Leu Ala Pro Ala Ala Leu Thr Pro Gly Leu  
 50 55 60  
 Glu Pro Gly Leu Ser Pro Arg Ala Leu Cys Leu Ile Ser Leu Gln Pro  
 65 70 75 80  
 Asp Arg Thr Pro Pro Ala Ala His Pro His Ala Cys Thr His Pro Thr  
 85 90 95  
 His Thr Thr His Ala Arg  
 100

<210> 359  
 <211> 265  
 <212> DNA  
 <213> Homo sapiens

<400> 359  
 acgcgtaccg acaagcgcgc ggtgatggcc gaccttcgcg aatcgggccc aatcgagcag  
 60  
 gatgcggaca tgatcgtctt catctaccgc gacgattact acaacaagga aaattcgccg  
 120  
 gacaaggggc tggccgagat catcatcggc aagcatcggg ggggccccac cggctcgtgc  
 180  
 aagctgaagt tcttcggcga gtacaccgt ttcgacaacc tggcccacaa ctcggttggg  
 240  
 tcgttcgaat aacggatgat tccgg  
 265

<210> 360  
 <211> 83  
 <212> PRT



<213> Homo sapiens

<400> 360

```

Thr Arg Thr Asp Lys Arg Pro Val Met Ala Asp Leu Arg Glu Ser Gly
 1             5             10             15
Ala Ile Glu Gln Asp Ala Asp Met Ile Val Phe Ile Tyr Arg Asp Asp
          20             25             30
Tyr Tyr Asn Lys Glu Asn Ser Pro Asp Lys Gly Leu Ala Glu Ile Ile
          35             40             45
Ile Gly Lys His Arg Gly Gly Pro Thr Gly Ser Cys Lys Leu Lys Phe
          50             55             60
Phe Gly Glu Tyr Thr Arg Phe Asp Asn Leu Ala His Asn Ser Val Gly
65             70             75             80
Ser Phe Glu

```

<210> 361

<211> 453

<212> DNA

<213> Homo sapiens

<400> 361

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gctttgcagg aggaaatctc tatctctggc tgcaagatga ggctgagcta cctgagcagc
60
cggacccctg gctacaaatc tgtcctgagg atcagcctca cccacccgac catccccctc
120
aacctcatga aggtgcacct catggtagcg gtggagggcc gcctcttcag gaagtgggtc
180
gctgcagccc cagacctgtc ctattatttc atttgggaca agacagacgt ctacaaccag
240
aaggtgtttg ggctttcaga agcctttggt tccgtggggt atgaatatga atcctgcccc
300
gatctaattc tgtgggaaaa aagaacaaca gtgctgcagg gctatgaaat tgacgcgtcc
360
aagcttgag gatggagcct agacaaacat catgccctca acattcaaag tggcatcctg
420
cacaaaggga atggngagaa ccagtttgtg tct
453

```

<210> 362

<211> 151

<212> PRT

<213> Homo sapiens

<400> 362

```

Ala Leu Gln Glu Glu Ile Ser Ile Ser Gly Cys Lys Met Arg Leu Ser
 1             5             10             15
Tyr Leu Ser Ser Arg Thr Pro Gly Tyr Lys Ser Val Leu Arg Ile Ser
          20             25             30
Leu Thr His Pro Thr Ile Pro Phe Asn Leu Met Lys Val His Leu Met
          35             40             45
Val Ala Val Glu Gly Arg Leu Phe Arg Lys Trp Phe Ala Ala Ala Pro
          50             55             60
Asp Leu Ser Tyr Tyr Phe Ile Trp Asp Lys Thr Asp Val Tyr Asn Gln

```

```

65          70          75          80
Lys Val Phe Gly Leu Ser Glu Ala Phe Val Ser Val Gly Tyr Glu Tyr
          85          90          95
Glu Ser Cys Pro Asp Leu Ile Leu Trp Glu Lys Arg Thr Thr Val Leu
          100          105          110
Gln Gly Tyr Glu Ile Asp Ala Ser Lys Leu Gly Gly Trp Ser Leu Asp
          115          120          125
Lys His His Ala Leu Asn Ile Gln Ser Gly Ile Leu His Lys Gly Asn
          130          135          140
Gly Glu Asn Gln Phe Val Ser
145          150

```

<210> 363

<211> 502

<212> DNA

<213> Homo sapiens

<400> 363

```

gggtacaaaaa aagtttgcca cagtattcac actccagggtc tccataaacc ttccagatcc
60
gctcacacaaa gctggtgttc atttgcttct tctgtaaaact gttcaggacc ttcataaaag
120
cggtgatgcc tgaccggtgc tcaggggcag ctttgcaaga gtcaggctga tgtgtgatgg
180
tgtccccacc accagctact ggagggagga ggtctgaggg ctcagctggg tttgacctga
240
gacacctgct gggatctggg tcaccagctg aaagcacagc catgttctgc cttcccccta
300
gggggctctg ggcgccatgg ctttcctgat ctgaccagc actctggggc ttggacagca
360
gtagtgtgat cacttcacct tgcgtctgga ctgagcttct gtgctgcatg tctgggggct
420
tctcaggagc agcatgagcc tctgcggagg aggtatcatt tttcaaaaaa aaatcatctg
480
aaaccacctc ttgagaatgc ag
502

```

<210> 364

<211> 136

<212> PRT

<213> Homo sapiens

<400> 364

```

Met Gln His Arg Ser Ser Val Gln Thr Gln Gly Glu Val Ile Thr Leu
1          5          10          15
Leu Leu Ser Lys Ala Gln Ser Ala Gly Ser Asp Gln Glu Ser His Gly
          20          25          30
Ala Gln Ser Pro Leu Gly Glu Gly Gln Asn Met Ala Val Leu Ser Ala
          35          40          45
Gly Asp Pro Asp Pro Ser Arg Cys Leu Arg Ser Asn Pro Ala Glu Ala
          50          55          60
Ser Asp Leu Leu Pro Pro Val Ala Gly Gly Gly Asp Thr Ile Thr His
65          70          75          80
Gln Pro Asp Ser Cys Lys Ala Ala Pro Glu His Arg Ser Gly Ile Thr

```

				85					90					95					
Ala	Phe	Met	Lys	Val	Leu	Asn	Ser	Leu	Gln	Lys	Lys	Gln	Met	Asn	Thr				
			100						105					110					
Ser	Leu	Cys	Glu	Arg	Ile	Trp	Lys	Val	Tyr	Gly	Asp	Leu	Glu	Cys	Glu				
		115					120						125						
Tyr	Cys	Gly	Lys	Leu	Phe	Trp	Tyr												
		130					135												

&lt;210&gt; 365

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 365

```

atctcaacgg atgcatccat caaggagatg atccccccag gtgctcttgt tatgctcaca
60
ccactgatcg ttgggattct atttgggggtt gagaccctct ctggagtcct tgctggtgcc
120
cttgtctctg gtgttcagat tgccatttct gcatccaaca ctggtggtgc ctgggacaac
180
gccaagaagt acattgaggc tggagtttca gagcatgcca ggacccttgg cccaaaaggt
240
tctgaccctc acaaggcggc tgtcattggt gacaccattg gagatcctct caaggacacg
300
tctggccctt ccctcaacat cctcatcaag ctt
333

```

&lt;210&gt; 366

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 366

Ile	Ser	Thr	Asp	Ala	Ser	Ile	Lys	Glu	Met	Ile	Pro	Pro	Gly	Ala	Leu				
1				5				10					15						
Val	Met	Leu	Thr	Pro	Leu	Ile	Val	Gly	Ile	Leu	Phe	Gly	Val	Glu	Thr				
			20					25					30						
Leu	Ser	Gly	Val	Leu	Ala	Gly	Ala	Leu	Val	Ser	Gly	Val	Gln	Ile	Ala				
		35				40						45							
Ile	Ser	Ala	Ser	Asn	Thr	Gly	Gly	Ala	Trp	Asp	Asn	Ala	Lys	Lys	Tyr				
		50			55					60									
Ile	Glu	Ala	Gly	Val	Ser	Glu	His	Ala	Arg	Thr	Leu	Gly	Pro	Lys	Gly				
65				70				75					80						
Ser	Asp	Pro	His	Lys	Ala	Ala	Val	Ile	Gly	Asp	Thr	Ile	Gly	Asp	Pro				
			85					90					95						
Leu	Lys	Asp	Thr	Ser	Gly	Pro	Ser	Leu	Asn	Ile	Leu	Ile	Lys	Leu					
			100					105					110						

&lt;210&gt; 367

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 367

gcgttcgtcg cactacccgg cggcggcgga acccttgacg agctactcga agcatggaca  
60  
tggcagcagc tcggtgtaca cagcaaaccg gtgngccttg tacgactcga cnccttctgg  
120  
gcaccgctga cgcgctact caaccacatg accatcgaaa gcttcattcg ccctgaggac  
180  
cgcgcctcgc tcgtgatcgc cgataccata catcagctga tggccgatct tgagggatgg  
240  
accccaccac caccgaagtg gcgctcgtga catagaacaa atgattctga ctatggctca  
300  
ttgacatctg cgcagcggt actagctcca ttgacttcaa atcgggcctt ggccgaggt  
360  
cngttcaggt ggcccgaat g  
381

<210> 368

<211> 89

<212> PRT

<213> Homo sapiens

<400> 368

Ala	Phe	Val	Ala	Leu	Pro	Gly	Gly	Gly	Gly	Thr	Leu	Asp	Glu	Leu	Leu
1				5					10				15		
Glu	Ala	Trp	Thr	Trp	Gln	Gln	Leu	Gly	Val	His	Ser	Lys	Pro	Val	Xaa
		20					25					30			
Leu	Val	Arg	Leu	Asp	Xaa	Phe	Trp	Ala	Pro	Leu	Thr	Ala	Leu	Leu	Asn
		35				40					45				
His	Met	Thr	Ile	Glu	Ser	Phe	Ile	Arg	Pro	Glu	Asp	Arg	Ala	Ser	Leu
	50					55				60					
Val	Ile	Ala	Asp	Thr	Ile	His	Gln	Leu	Met	Ala	Asp	Leu	Glu	Gly	Trp
65					70				75					80	
Thr	Pro	Pro	Pro	Pro	Lys	Trp	Arg	Ser							
					85										

<210> 369

<211> 313

<212> DNA

<213> Homo sapiens

<400> 369

gatacatgat cctctcatat cgcacacaca ccgctccctt ctgccgcaat tcgcagacaa  
60  
acttgcgagc gcttcacagc aagccgtcaa ggctgcttcc tgtgggctac cgatagtctc  
120  
gtacgcgagt tctcggacat caacgccaac gtcgggcaag atactgtcaa cgccatctac  
180  
acattctacg agcagcaagc gaccagtttc cttcgccagc tgaacgacct cccacccgaa  
240  
gagcttcccg acgtcatcga ggactttctc cgctgtcca ctgatgtect tctttacat  
300  
ttccagcaag ctt  
313

<210> 370

<211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 370  
 Ser Ser His Thr Ala His Thr Pro Leu Pro Ser Ala Ala Ile Arg Arg  
 1 5 10 15  
 Gln Thr Cys Ala Gly Phe Thr Ala Ser Arg Gln Gly Cys Phe Leu Trp  
 20 25 30  
 Ala Thr Asp Ser Leu Val Arg Glu Phe Ser Asp Ile Asn Ala Asn Val  
 35 40 45  
 Gly Gln Asp Thr Val Asn Ala Ile Tyr Thr Phe Tyr Glu Gln Gln Ala  
 50 55 60  
 Thr Ser Phe Leu Arg Gln Leu Asn Asp Leu Pro Pro Glu Glu Leu Pro  
 65 70 75 80  
 Asp Val Ile Glu Asp Phe Phe Arg Leu Ser Thr Asp Val Leu Leu Tyr  
 85 90 95  
 His Phe Gln Gln Ala  
 100

<210> 371  
 <211> 380  
 <212> DNA  
 <213> Homo sapiens

<400> 371  
 atgacggggtc acgtcatcct ggcgattcca caggtgggtga cgatcatggat cggcctcatc  
 60  
 tgcacgcgcca ttggcacggg ctttatcaag ccgaacctct ccacgggtggg aggaggtctt  
 120  
 tacgatgacg gtgacccccg ccgcgatcag ggtttcctgt acttctacat gtcgatcagt  
 180  
 attggatctc tcttcgcgcc gatcgtcacc ggcctcctca aggaccatta cggctaccac  
 240  
 gtaggtttca ttgccgtgc tatcggtatg gctctgggtc tgategcctt cttccacggt  
 300  
 cgttccaaac tgcgtgagct cgccttcgac atccccaatc cgctggcccc cggcgagggt  
 360  
 cgccggatgg tgctccgcgg  
 380

<210> 372  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 372  
 Met Thr Gly His Val Ile Leu Ala Ile Pro Gln Val Val Thr Ser Trp  
 1 5 10 15  
 Ile Gly Leu Ile Cys Ile Ala Ile Gly Thr Gly Phe Ile Lys Pro Asn  
 20 25 30  
 Leu Ser Thr Val Val Gly Gly Leu Tyr Asp Asp Gly Asp Pro Arg Arg  
 35 40 45  
 Asp Gln Gly Phe Leu Tyr Phe Tyr Met Ser Ile Ser Ile Gly Ser Leu

```

      50              55              60
Phe Ala Pro Ile Val Thr Gly Leu Leu Lys Asp His Tyr Gly Tyr His
65              70              75              80
Val Gly Phe Ile Ala Ala Ala Ile Gly Met Ala Leu Gly Leu Ile Ala
      85              90              95
Phe Phe His Gly Arg Ser Lys Leu Arg Glu Leu Ala Phe Asp Ile Pro
      100              105              110
Asn Pro Leu Ala Pro Gly Glu Gly Arg Arg Met Val Leu Arg
      115              120              125

```

<210> 373  
 <211> 475  
 <212> DNA  
 <213> Homo sapiens

```

<400> 373
acatgttgga aaaattgcct ccactctgg tgctacaggt atgaatctca gccacagtga
60
tgactgtggc agctacaggc ctgatgaaca cccaccaag aaaaggagca tcatgtgcct
120
gcttctctct ggttcctaaa tcctttggcc aaacattttc cccacaaccc tccactccag
180
ttggctggtc actgcctctc agaaagaagt ccaggtccc tgtcagcccc agagcgccctg
240
catggactct gccactgtc cctttccaac acggaggccc ccaattctgg ggaccctac
300
accctaccct gtaccaccac atccccatgc ctgctccaga cagcactaac ctcccatgac
360
agtgggacca aagcagttct taaaggtcca atccactcag ttcttaaagt aaaaacagtt
420
gcccagagt ccccccaaa gacgtccgca catatgccaa acattcggtg tgcac
475

```

<210> 374  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 374
Met Gly Met Trp Trp Tyr Arg Val Gly Cys Arg Gly Pro Gln Asn Trp
1      5      10      15
Gly Pro Pro Cys Trp Lys Gly Thr Val Gly Arg Val His Ala Gly Ala
      20      25      30
Leu Gly Leu Thr Gly Thr Trp Asp Phe Phe Leu Arg Gly Ser Asp Gln
      35      40      45
Pro Thr Gly Val Glu Gly Cys Gly Glu Asn Val Trp Pro Lys Asp Leu
      50      55      60
Gly Thr Arg Glu Lys Gln Ala His Asp Ala Pro Phe Leu Gly Gly Val
65      70      75      80
Phe Ile Arg Pro Val Ala Ala Thr Val Ile Thr Val Ala Glu Ile His
      85      90      95
Thr Cys Ser Thr Arg Val Gly Gly Asn Phe Ser Asn Met
      100      105

```

<210> 375  
 <211> 332  
 <212> DNA  
 <213> Homo sapiens

<400> 375  
 nnacgcgtcg cctccacctc gaaacccgcc ggcggtcgtt ttttcacat gcccgaccgc  
 60  
 aaggcccaag ttgcgacggt cacggacacg ctgtatttca cgccgctcgca atgggatgga  
 120  
 tgcattggcac ggatgcgtgg ggataagata tcagcactga agtggaatca gatgcagatg  
 180  
 gcggcatgct ccttcatagc ggcagtgggt gcgaagctgg gctgcccgc gcgcactatg  
 240  
 ggcacggcgc agctgctgta ccagcgtttc catctatttc atgcgccgac tgagttttcg  
 300  
 ttacatgagg tggctttgac gtgtctcttc ac  
 332

<210> 376  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 376  
 Xaa Arg Val Ala Ser Thr Ser Lys Pro Ala Gly Gly Arg Phe Phe Thr  
 1 5 10 15  
 Met Ala Asp Arg Lys Ala Gln Val Ala Thr Val Thr Asp Thr Leu Tyr  
 20 25 30  
 Phe Thr Pro Ser Gln Trp Asp Gly Cys Met Ala Arg Met Arg Gly Asp  
 35 40 45  
 Lys Ile Ser Ala Leu Lys Trp Asn Gln Met Gln Met Ala Ala Cys Ser  
 50 55 60  
 Phe Ile Ala Ala Val Gly Ala Lys Leu Gly Cys Pro Gln Arg Thr Met  
 65 70 75 80  
 Gly Thr Ala Gln Leu Leu Tyr Gln Arg Phe His Leu Phe His Ala Pro  
 85 90 95  
 Thr Glu Phe Ser Leu His Glu Val Ala Leu Thr Cys Leu Phe  
 100 105 110

<210> 377  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 377  
 cgcgtgccag gtatgtcaac tgatctgtcg gatatttccg aggttgagta ccgtcaactg  
 60  
 aggctggaac gagggtgct gtgttcggtg tggactcagg gaactgccgc agacgccgag  
 120  
 aacgctatgg cggagctgaa agcccttgcg gaaacggcgg gatctcaggt actcgaagct  
 180  
 gtcattgcaac gtcggactac cccggatccg gcgacgtaca ttgggttcggg caaggtggct  
 240

gagcttgccg aggtggtgcg ggcgactggt gccgatactg tcatttgtga cggatgaactt  
 300  
 gacgccgctc agttgcgcaa cctcgaggat cgggtcaagn gcaaagttgt ggaccgggtcg  
 360  
 gtctgattc  
 369

<210> 378

<211> 121

<212> PRT

<213> Homo sapiens

<400> 378

Arg	Val	Pro	Gly	Met	Ser	Thr	Asp	Leu	Ser	Asp	Ile	Ser	Glu	Val	Glu
1				5					10					15	
Tyr	Arg	Gln	Leu	Arg	Leu	Glu	Arg	Val	Val	Leu	Cys	Ser	Val	Trp	Thr
		20					25						30		
Gln	Gly	Thr	Ala	Ala	Asp	Ala	Glu	Asn	Ala	Met	Ala	Glu	Leu	Lys	Ala
		35				40					45				
Leu	Ala	Glu	Thr	Ala	Gly	Ser	Gln	Val	Leu	Glu	Ala	Val	Met	Gln	Arg
	50					55				60					
Arg	Thr	Thr	Pro	Asp	Pro	Ala	Thr	Tyr	Ile	Gly	Ser	Gly	Lys	Val	Ala
65				70					75					80	
Glu	Leu	Ala	Glu	Val	Val	Arg	Ala	Thr	Gly	Ala	Asp	Thr	Val	Ile	Cys
			85					90					95		
Asp	Gly	Glu	Leu	Asp	Ala	Ala	Gln	Leu	Arg	Asn	Leu	Glu	Asp	Arg	Val
			100				105						110		
Lys	Xaa	Lys	Val	Val	Asp	Arg	Ser	Val							
		115					120								

<210> 379

<211> 408

<212> DNA

<213> Homo sapiens

<400> 379

acgcgttact taaacttatac tgtaaataat aaattcatta tttctagttg gttagggtact  
 60  
 atgggctgtg gtttaccagg tgctatggca gctaaaattg cttatccaaa ccgtcaagca  
 120  
 gtagctatca caggcgacgg tgcgttccaa atggtaatgc aagactttgc tacagctggt  
 180  
 caatataact taccaatgac aatctttgta ttaaataaca aacaattgtc attcattaaa  
 240  
 tatgaacaac aagctgctgg tgaattagag tatgccattg atttctctga tatggatcat  
 300  
 gctaaaatttg ctgaagctgc tgggtggtaaa ggctatgttg tgagagatgt aagtcgtctt  
 360  
 gacgacatcg ttgaagaggc aatggctcaa gatgttccaa caatcggt  
 408

<210> 380

<211> 136

<212> PRT



<213> Homo sapiens

<400> 380

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Thr Arg Tyr Leu Asn Leu Ser Val Asn Asn Lys Phe Ile Ile Ser Ser
 1           5           10           15
Trp Leu Gly Thr Met Gly Cys Gly Leu Pro Gly Ala Met Ala Ala Lys
 20           25           30
Ile Ala Tyr Pro Asn Arg Gln Ala Val Ala Ile Thr Gly Asp Gly Ala
 35           40           45
Phe Gln Met Val Met Gln Asp Phe Ala Thr Ala Val Gln Tyr Asn Leu
 50           55           60
Pro Met Thr Ile Phe Val Leu Asn Asn Lys Gln Leu Ser Phe Ile Lys
 65           70           75           80
Tyr Glu Gln Gln Ala Ala Gly Glu Leu Glu Tyr Ala Ile Asp Phe Ser
 85           90           95
Asp Met Asp His Ala Lys Phe Ala Glu Ala Ala Gly Gly Lys Gly Tyr
 100          105          110
Val Val Arg Asp Val Ser Arg Leu Asp Asp Ile Val Glu Glu Ala Met
 115          120          125
Ala Gln Asp Val Pro Thr Ile Val
 130          135

```

<210> 381

<211> 613

<212> DNA

<213> Homo sapiens

<400> 381

```

naccggtcat aggcgggccc agtgaagac caccgaaca cagttggtg agatccgct
60
tgagggaag gtcctgcgcg tccgcgaaa tctggtaag gcctaccact ctgggctgat
120
cgacgtcgag gactgaaccc tgggagcctg ggcggtccag catgactgct caggctcatt
180
acaaaaacgc gtcgatcccg tagggttgct gtcatagaca agcccgaagt gaccctgccc
240
gattccgccc ccgacgacct cgtcgttgag gacatcacca tcggcgacgg ccctgaagcg
300
tccgctggca acctcgtcga agtgactac gtcggcgtgg ccttaagcaa tggctcgtgag
360
ttcgattctt cctggaaccg cggggagccg ctgaccttcc aactaggggc tggccaggtg
420
atccccgagt gggatgaagg tgtccaaggt atgaaggctg gtggacgacg caaactcgtc
480
atccccacc accttgctta cgggtccgaa ggaatctccg gtgtgatcgc tggcggtag
540
acgtggtct tcgtctgca ccttgtaac atcatctgac gtgacccccg ctcaagcagt
600
cttcgcgccc ggg
613

```

<210> 382

<211> 137

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 382

```

Leu Leu Arg Leu Ile Thr Lys Thr Arg Arg Ser Arg Arg Val Val Val
 1           5           10           15
Met Ser Lys Pro Glu Val Thr Leu Pro Asp Ser Ala Pro Asp Asp Leu
      20           25           30
Val Val Glu Asp Ile Thr Ile Gly Asp Gly Pro Glu Ala Ser Ala Gly
      35           40           45
Asn Leu Val Glu Val His Tyr Val Gly Val Ala Leu Ser Asn Gly Arg
      50           55           60
Glu Phe Asp Ser Ser Trp Asn Arg Gly Glu Pro Leu Thr Phe Gln Leu
65           70           75           80
Gly Ala Gly Gln Val Ile Pro Glu Trp Asp Glu Gly Val Gln Gly Met
      85           90           95
Lys Val Gly Gly Arg Arg Lys Leu Val Ile Pro His His Leu Ala Tyr
      100          105          110
Gly Pro Gln Gly Ile Ser Gly Val Ile Ala Gly Gly Glu Thr Leu Val
      115          120          125
Phe Val Cys Asp Leu Val Asn Ile Ile
      130          135

```

&lt;210&gt; 383

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 383

```

nggagcaaca cctggtcctt gggaatgaag tgtaggagtt gcatttgctg aggttggtgt
60
ttgccaaaga gatgccagct tcttcgaact actgctgtgc aactcttcat gttcaaaacc
120
cagttttctg tttttcacac ctgaacatac accccctgc agttgggtgg ctccccggtt
180
accagctggg ctctatctac agagagagca atggcttccc ttcccttgaa ggaagtctca
240
ccctcacaag gacacttgat ccgctgcaaa gcagaaagtg tgcggaccct ttgggaaggg
300
cgttcttttc ttgtttagaa cctaggattc tgtttttccc aaacaggatc an
352

```

&lt;210&gt; 384

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 384

```

Met Pro Ala Ser Ser Asn Tyr Cys Cys Ala Thr Leu His Val Gln Asn
 1           5           10           15
Pro Val Phe Cys Phe Ser His Leu Asn Ile His Pro Pro Ala Val Gly
      20           25           30
Trp Leu Pro Arg Tyr Gln Leu Gly Ser Ile Tyr Arg Glu Ser Asn Gly
      35           40           45
Phe Pro Ser Leu Glu Gly Ser Leu Thr Leu Thr Arg Thr Leu Asp Pro

```

50	55	60
Leu Gln Ser Arg Lys Cys Ala Asp Pro Leu Gly Arg Ala Phe Phe Ser		
65	70	75
Cys Leu Glu Pro Arg Ile Leu Phe Phe Pro Asn Arg Ile		80
85	90	

<210> 385  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

<400> 385  
 gccggcgcca cgaaatgcaa aatgcgcctt tcaccggacg ccagggtgat cgagccgcca  
 60  
 gcacctcggg caatgtcctg ggctgactg gcacacgcaa tcaaagcgag caacaacaca  
 120  
 caaaaacgca tcatgaggca gacgccaggg aagtgcagaga agccgcagca ggcgcgcggc  
 180  
 gattggaaat atcgggtgagg ctaatggtca ccagcgcttg caggttgat tccgtggcca  
 240  
 attcgcggaa cgacagcacc gccagttcca gctcgccgag cagcaccagg cgacgcaagc  
 300  
 tgcggcgcaa ctccgggtgc accaacaaca ccgcactgtt ca  
 342

<210> 386  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 386
Met Gln Asn Ala Pro Phe Thr Gly Arg Gln Val Asp Arg Ala Ala Ser
1 5 10 15
Thr Ser Gly Asn Val Leu Gly Leu Thr Gly Thr Arg Asn Gln Ser Glu
20 25 30
Gln Gln His Thr Lys Thr His His Glu Ala Asp Ala Arg Glu Val Thr
35 40 45
Glu Ala Ala Ala Gly Ala Arg Arg Leu Glu Ile Ser Val Arg Leu Met
50 55 60
Val Thr Ser Ala Cys Arg Leu Tyr Ser Val Ala Asn Ser Arg Asn Asp
65 70 75 80
Ser Thr Ala Ser Ser Ser Ser Pro Arg Ser Thr Arg Arg Arg Lys Leu
85 90 95
Arg Arg Asn Ser Gly Cys Thr Asn Asn Thr Ala Leu Phe
100 105

<210> 387  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 387  
 acgcgtgacg cgccggcatc ggaagcggtg actgcagaga agaccgcgca cgtggctgtg  
 60

ggacgtgctg gcacgtctga catggtgcgt ggacccgcct tctcttcgcc tgcgcacgcc  
 120  
 atgcaagagg agcttgacaa tgtgcgtgat ctgcgccatg cgcggcagca agcgctcgat  
 180  
 gctgttcggt ccgagctgct cgaagcgcag caagcatgtg cctcgtgccca gctgcagctg  
 240  
 cagcatgtgc cagatgatcg tgtgcgagcg catcccatat accaggcgct ccatgcggac  
 300  
 gttgcttaca tgcagcaaga acttgatcac gtacgagacg cattggcttc ggcagaatct  
 360  
 gagaatgcga gcctgcgcg  
 379

<210> 388

<211> 114

<212> PRT

<213> Homo sapiens

<400> 388

Met	Arg	Leu	Val	Arg	Asp	Gln	Val	Leu	Ala	Ala	Cys	Lys	Gln	Arg	Pro
1			5					10					15		
His	Gly	Ala	Pro	Gly	Ile	Trp	Asp	Ala	Leu	Ala	His	Asp	His	Leu	Ala
		20					25					30			
His	Ala	Ala	Ala	Ala	Ala	Gly	Thr	Arg	His	Met	Leu	Ala	Ala	Leu	Arg
		35				40					45				
Ala	Ala	Arg	Asn	Glu	Gln	His	Arg	Ala	Leu	Ala	Ala	Ala	His	Gly	Arg
	50				55				60						
Asp	His	Ala	His	Cys	Gln	Ala	Pro	Leu	Ala	Trp	His	Ala	Gln	Ala	Lys
65				70				75					80		
Arg	Arg	Arg	Val	His	Ala	Pro	Cys	Gln	Thr	Cys	Gln	His	Val	Pro	Gln
			85				90					95			
Pro	Arg	Ala	Arg	Ser	Ser	Leu	Gln	Ser	Thr	Leu	Pro	Met	Pro	Ala	Arg
		100				105					110				
His	Ala														

<210> 389

<211> 382

<212> DNA

<213> Homo sapiens

<400> 389

ngatggccga ctgtcccact gtcagtacgc gaagctcgcc gtcgagtcgg tccacgtccg  
 60  
 ggccctccac gtgctccgca accctccgaa gcgatgacct ggcccggggg cggcaacgag  
 120  
 gtattgcgtt tggagacgct tgggggtcaat tacggccagg tgcgcgccgt cgatgccctg  
 180  
 acgaccaccg tagagcgcg caccatcacc tgctcatgg gtcgaaatgg atcaggcaag  
 240  
 tcgtctctga tgtgggcat ccaaggggca acaaagtcct cagggagggt actggtcaac  
 300  
 cagcagggtt cttgggctga cccccgaaa gccgacgccg cgaccgctcg acgaatggtg  
 360

agcttagtcc cgcagtcagc cn  
382

<210> 390

<211> 127

<212> PRT

<213> Homo sapiens

<400> 390

Xaa	Trp	Pro	Thr	Val	Pro	Leu	Ser	Val	Arg	Glu	Ala	Arg	Arg	Arg	Val
1				5					10					15	
Gly	Pro	Arg	Pro	Gly	Leu	Pro	Arg	Ala	Pro	Gln	Pro	Ser	Glu	Ala	Met
			20					25					30		
Thr	Trp	Pro	Gly	Gly	Gly	Asn	Glu	Val	Leu	Arg	Leu	Glu	Thr	Leu	Gly
			35				40					45			
Val	Asn	Tyr	Gly	Glu	Val	Arg	Ala	Val	Asp	Ala	Leu	Thr	Thr	Thr	Val
	50					55					60				
Glu	Arg	Gly	Thr	Ile	Thr	Cys	Leu	Met	Gly	Arg	Asn	Gly	Ser	Gly	Lys
65					70					75					80
Ser	Ser	Leu	Met	Trp	Ala	Ile	Gln	Gly	Ala	Thr	Lys	Ser	Ser	Gly	Arg
				85					90					95	
Val	Leu	Val	Asn	His	Glu	Gly	Ser	Trp	Ala	Asp	Pro	Arg	Lys	Ala	Asp
			100						105				110		
Ala	Ala	Thr	Ala	Arg	Arg	Met	Val	Ser	Leu	Val	Pro	Gln	Ser	Ala	
			115				120					125			

<210> 391

<211> 456

<212> DNA

<213> Homo sapiens

<400> 391

nnacgcgttg ccgctctgtg aggcgcctat cacggtgaca ctctcgggtgc tatgagcgtg  
60  
tgcgacccta tcggtggcat gcacgccttg ttcagcgact ctattcccca gcagatcttc  
120  
ctgcccgcgc cctccttctt tcgccgccga cgaggccgac gtggagacgt ggtgcagcga  
180  
ggccgatgaa tcctggacac ccaccgcgac gacctggccg ggatcattgt cgagcccatc  
240  
ttgcaaggag ccggaggcat gtggccgtgg tctccgtcct gtctgaagca cctgcgccgt  
300  
cgtgctgatg aacttgacct agttcttctc gccgacgagg tcgctactgg atttgggcgg  
360  
actggcaaac ttttcgcatg cgagtgggccc gatatcgctc ctgacatcat ggtggttggg  
420  
aaatccatga ctggcggata cctgaccag tcggcc  
456

<210> 392

<211> 55

<212> PRT

<213> Homo sapiens

&lt;400&gt; 392

Gly Ala Tyr His Gly Asp Thr Leu Gly Ala Met Ser Val Cys Asp Pro  
 1 5 10 15  
 Ile Gly Gly Met His Ala Xaa Phe Ser Asp Ser Ile Pro Gln Gln Ile  
 20 25 30  
 Phe Leu Pro Ala Pro Ser Phe Phe Arg Arg Arg Arg Gly Arg Arg Gly  
 35 40 45  
 Asp Val Val Gln Arg Gly Arg  
 50 55

&lt;210&gt; 393

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 393

nacgcgttgc tcgtcattgg tggctactcg gcctacgaag gtatctacac catgatgact  
 60  
 gagcgggacc ggtacccggc tttccgtatt ccgacgggtg gcatcccggc ttctatcgac  
 120  
 aacaacctcc ccggttcgga actgtccatc ggcaccgaca ccgctctcaa cgtcatcgtc  
 180  
 gaggcgatgg acaagattaa ggagtcgggt atcgcgcca gacgctgctt cgtcgtcgag  
 240  
 acgatgggtc gtgactgcgg atacctcgcg ttgatgtcgg gtatcgcagc tggcgtgag  
 300  
 cggatctata ccaacgagga cggatatctc ctggacgac tagccaacga cgtccattgg  
 360  
 ttgcgggagt c  
 371

&lt;210&gt; 394

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 394

Xaa Ala Leu Leu Val Ile Gly Gly Tyr Ser Ala Tyr Glu Gly Ile Tyr  
 1 5 10 15  
 Thr Met Met Thr Glu Arg Asp Arg Tyr Pro Ala Phe Arg Ile Pro Thr  
 20 25 30  
 Val Cys Ile Pro Ala Ser Ile Asp Asn Asn Leu Pro Gly Ser Glu Leu  
 35 40 45  
 Ser Ile Gly Thr Asp Thr Ala Leu Asn Val Ile Val Glu Ala Met Asp  
 50 55 60  
 Lys Ile Lys Glu Ser Gly Ile Ala Ser Arg Arg Cys Phe Val Val Glu  
 65 70 75 80  
 Thr Met Gly Arg Asp Cys Gly Tyr Leu Ala Leu Met Ser Gly Ile Ala  
 85 90 95  
 Ala Gly Ala Glu Arg Ile Tyr Thr Asn Glu Asp Gly Ile Ser Leu Asp  
 100 105 110  
 Asp Leu Ala Asn Asp Val His Trp Leu Arg Glu  
 115 120

<210> 395  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 395  
 gaattctagt tgggagattc attgaccaga cttttggaat aaacactagt catcatgcta  
 60  
 gcgacaggtg gtcttgtgca tggtagaaag gcagtccaag cctatgtctc tgaaacctgc  
 120  
 tctcatttct gttttctact ttacgattta tggtatctca tactcccat gttgcctggt  
 180  
 ctccagtttt tttacttgtg ttatttccat tcttctatcc ctgctcaatt tctgcctcag  
 240  
 ggcagaattg tgtccaacag ctcttaaagt cagcgcagaa actgtgatgt taaaaacatc  
 300  
 ttgttatccg gccccaaaac atgttgtcct tggtaactct tactggtttg t  
 351

<210> 396  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 396  
 Met Val Glu Arg Gln Ser Lys Pro Met Ser Leu Lys Pro Ala Leu Ile  
 1 5 10 15  
 Ser Val Phe Tyr Phe Thr Ile Tyr Val Ile Ser Tyr Ser Pro Cys Cys  
 20 25 30  
 Leu Phe Ser Ser Phe Phe Thr Cys Val Ile Ser Ile Leu Leu Phe Leu  
 35 40 45  
 Leu Asn Phe Cys Leu Arg Ala Glu Leu Cys Pro Thr Ala Leu Lys Cys  
 50 55 60  
 Ser Ala Glu Thr Val Met Leu Lys Thr Ser Cys Tyr Pro Ala Pro Lys  
 65 70 75 80  
 His Val Val Leu Gly Asn Ser Tyr Trp Phe  
 85 90

<210> 397  
 <211> 483  
 <212> DNA  
 <213> Homo sapiens

<400> 397  
 gccgtcatta aagagatcac ccctctcctc caacctggtg atgtcctcgt cgacggtggt  
 60  
 aatgcttatt ttggtgatac ccgccgccgt gaggaggaaa tacgtccac cggcattcac  
 120  
 tatgttggtg ctggcatctc cgggtggggga gtcggggccc tgagggtccc atcaattatg  
 180  
 cctggcgggg ttaaggaatc ttacgaaatc atcggaccgg tcttagaaaa aatctccgcc  
 240  
 cagtcgacg gtgaaccctg ctgcgcatgg atgggtactg acggcgccgg acacttcgtc  
 300

aagatggtcc ataatggcat cgagtaacgcc gatatgcagt tcattggcga ggcgcccttc  
 360  
 ctttttgcgn tgcccgccgg tttgaccaat gctgaggccg ccgatgcctt cgagtcgtgg  
 420  
 aaccatggcg acctcaattc ctacctcgtc gaaatcactt ctcgggtact gcgtgccaaag  
 480  
 gat  
 483

<210> 398

<211> 161

<212> PRT

<213> Homo sapiens

<400> 398

Ala	Val	Ile	Lys	Glu	Ile	Thr	Pro	Leu	Leu	Gln	Pro	Gly	Asp	Val	Leu
1			5					10					15		
Val	Asp	Gly	Gly	Asn	Ala	Tyr	Phe	Gly	Asp	Thr	Arg	Arg	Arg	Glu	Glu
	20							25				30			
Glu	Ile	Arg	Pro	Thr	Gly	Ile	His	Tyr	Val	Gly	Thr	Gly	Ile	Ser	Gly
	35					40					45				
Gly	Gly	Val	Gly	Ala	Leu	Arg	Val	Pro	Ser	Ile	Met	Pro	Gly	Gly	Val
	50					55					60				
Lys	Glu	Ser	Tyr	Glu	Ile	Ile	Gly	Pro	Val	Leu	Glu	Lys	Ile	Ser	Ala
65					70					75				80	
His	Val	Asp	Gly	Glu	Pro	Cys	Cys	Ala	Trp	Met	Gly	Thr	Asp	Gly	Ala
			85						90				95		
Gly	His	Phe	Val	Lys	Met	Val	His	Asn	Gly	Ile	Glu	Tyr	Ala	Asp	Met
			100					105					110		
Gln	Phe	Ile	Gly	Glu	Ala	Pro	Phe	Leu	Phe	Ala	Xaa	Pro	Ala	Gly	Leu
		115					120					125			
Thr	Asn	Ala	Glu	Ala	Ala	Asp	Ala	Phe	Glu	Ser	Trp	Asn	His	Gly	Asp
	130					135					140				
Leu	Asn	Ser	Tyr	Leu	Val	Glu	Ile	Thr	Ser	Arg	Val	Leu	Arg	Ala	Lys
145					150					155					160

Asp

<210> 399

<211> 314

<212> DNA

<213> Homo sapiens

<400> 399

nngggaatga agaccaccca gcccttcctt tcctcaaate ttctccaggc ttctgtgcat  
 60  
 ggctcatcca cccatccact cattcaccca tctatccatc cactcatcca cccatccagt  
 120  
 cattcactca tttgtccatc cactcatgta cccatccact cattcgccca tttatccatc  
 180  
 cactcaacca tccactcatc caccatcca nctcatcatc cgtccagtca cccatctatc  
 240  
 caccatgta tccatccact catccaccca tccactcatc tgtccatcca cttatccacc  
 300



catctactca ccca  
314

<210> 400  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 400  
Xaa Gly Met Lys Thr Thr Gln Pro Phe Leu Ser Ser Asn Leu Leu Gln  
1 5 10 15  
Ala Ser Val His Gly Ser Ser Thr His Pro Leu Ile His Pro Ser Ile  
20 25 30  
His Pro Leu Ile His Pro Ser Ser His Ser Leu Ile Cys Pro Ser Thr  
35 40 45  
His Val Pro Ile His Ser Phe Ala His Leu Ser Ile His Ser Thr Ile  
50 55 60  
His Ser Ser Thr His Pro Xaa His His Pro Ser Ser His Pro Ser Ile  
65 70 75 80  
His Pro Cys Ile His Pro Leu Ile His Pro Ser Thr His Leu Ser Ile  
85 90 95  
His Leu Ser Thr His Leu Leu Thr  
100

<210> 401  
<211> 2165  
<212> DNA  
<213> Homo sapiens

<400> 401  
gagaaaatgg aactacctgt atataaatta ggtgagcaaa cagtgatata ggtagtttta  
60  
agaagcaaat atatacagtc aatttaacag tgtttacttc tctggattgt ttaatgggtg  
120  
caaaatgaaa gatctattga agtttcacta tacattgcat tgattgaacc ttggagagtt  
180  
ttatgaaaaa gaggggcatc ccttgccatc tgtttgccag tcttccttgc cccttccttt  
240  
gaaatgcctg cctctttttt gccagattg tttcctgacc atccgaactc agatggggtc  
300  
ctctaagttc ttctggata ttcacaaatc cttcacaag gccacagtgc gaagtgaatg  
360  
atctggaggt gcctgggcat ctgtgttga agggagtcaa gactcaccag ccagtcagtt  
420  
tgtgggctac agttgtccca caaaaatcag gcatgttcac ctccctctg gggccctaca  
480  
gctgggactg atcatagcct cagattagaa gaaatactga cttctaactc tataagccag  
540  
cactcctggg taaggagtga agctctgttg gccatgccgc tttggactgc tgggcagagc  
600  
tgagcctaca gttttgtact ggggtgcacg gatgacagct gggaagatgg aaaggcagct  
660  
tgaggattta tagcagctaa agggtaaatg ctgttatgca aaaggcccc atatgaactt  
720

cctacaggtg tagccgcagc caagtgtctg tacagctgct gagaatttgt cggatgatga  
780  
aaaattcctc tttgcatcac aagcgagtgg aaagccaggg gctgcatgag tggagaaagc  
840  
acagtctggt ttttcaagta ctgcagagaa tgagaatacc cagccgggag cctggagttg  
900  
aggcccaggt tacacaggct cccggaatac agacctggga agatagggga ggagagggga  
960  
agcttgtggc cttttgatcc gccccggaa tgcccaccgt gcgctgcttt gctgccttca  
1020  
tctctgctc agaggccttc tccttcccag agacctcctt ggatgggtct aaggagagaca  
1080  
ctgcccgggc ctttttcctt gcaatcaciaa ggtccaaatc ctccaggctg cgcttgatcg  
1140  
gccgcgccgc cccaatgttc tacgggtcga tttccgggtg caggattggg tggaccatgc  
1200  
cttccatctt cctgaaattc tccagtctca catggtgagg ttttctgat cttgaaagcg  
1260  
attcagggtg ttttttaggg cctgacatgg tcatgggtga tacccgacag gctttggggt  
1320  
gacagtctcg actctggctg cctaagacct ggaactggga gatgcctttg ctctcctggg  
1380  
gccctgtggg ggaatgagcc agggccagga ccttgccggg aggtttgtgc gggttcttgg  
1440  
gaaggctcag atctgtaggc tgatcatccg taggggcttc tgctgccgcc gactttttgt  
1500  
cttgacaggtg cagggacgtg agataattta catggagctt ttcttggtgt ctgtgggaag  
1560  
gaaaagaact gttttccgat tcctgtaca tgtccctgga agggatattg gatgtctgtt  
1620  
cattatgaag atggtgctcg gtgtgtctgt agaggctatg gagatgaggg gacgagtaga  
1680  
agtcagccag gaagctaggc atgtgggaat gggggagggc ccttttctct aagagtttat  
1740  
ccttgccctc ctgaatttct tgcttcagga cgtaggagtc agcaaggggg ttaaggatgat  
1800  
gcttgagaaa gctgcagcgg tggggatctg atcgactcag tttctcatgc ttaaagatgt  
1860  
cattgatggg ctttctctct tccgagggtc tgcttctgaa actctggacg tgctgaatca  
1920  
ctgatggccg gctgaccgcc atatggtcag tgctttggcc atggtgggtc tgggacaaac  
1980  
tggaacacaa gtcaccccta gcaatcagtt tctttttgct gatcaaaggg ggtggggagc  
2040  
cataagggtg gctgctggag aggctggccc cactcacttg ggacaaaagc ttttcttgg  
2100  
ccagtgggga catcatgcct gggttgcccc tagagtagag caggggcgtg taattaagtc  
2160  
catgg  
2165

&lt;210&gt; 402

&lt;211&gt; 87

&lt;212&gt; PRT

<213> Homo sapiens

<400> 402

```

Glu Tyr Pro Ala Gly Ser Leu Glu Leu Arg Pro Glu Leu His Arg Leu
 1           5           10           15
Pro Glu Tyr Arg Pro Gly Lys Ile Gly Glu Glu Arg Gly Ser Leu Trp
          20           25           30
Pro Phe Asp Pro Pro Pro Glu Cys Pro Pro Cys Ala Ala Leu Leu Pro
          35           40           45
Ser Ser Pro Ala Gln Arg Pro Ser Pro Ser Gln Arg Pro Pro Trp Met
          50           55           60
Gly Leu Arg Glu Thr Leu Pro Gly Pro Phe Ser Leu Gln Ser Gln Gly
65           70           75           80
Pro Asn Pro Pro Gly Cys Ala
          85

```

<210> 403

<211> 369

<212> DNA

<213> Homo sapiens

<400> 403

```

cccatgggtg tgtcccagga cggcgctcatg aagcgtcagg taaatgacaa ggaaacggtc
60
gcgcacttgt tcgaatacac gacgcaagtg tctgtcgact cgacgccgca actcggtccag
120
ccttcgcccc cgtcgcaaga caacctcggtg cctgtccaga tgatcttttg cttcaagcag
180
cgcaacgcga aaaagatcaa tagccaccgc tgggtatttc atgcactggg ccgcattgcta
240
cagcccgaca tggtcgtctt ggtggacgtc ggcacgaagc ccggccacct cgccctatac
300
catctatggc aggcattcta tcaccgacct accttgggcg gtgcttgcg cgaaattcat
360
gctatgatc
369

```

<210> 404

<211> 123

<212> PRT

<213> Homo sapiens

<400> 404

```

Pro Met Gly Val Ser Gln Asp Gly Val Met Lys Arg Gln Val Asn Asp
 1           5           10           15
Lys Glu Thr Val Ala His Leu Phe Glu Tyr Thr Thr Gln Val Ser Val
          20           25           30
Asp Ser Thr Pro Gln Leu Val Gln Pro Ser Pro Thr Ser His Asp Asn
          35           40           45
Leu Val Pro Val Gln Met Ile Phe Cys Phe Lys Gln Arg Asn Ala Lys
          50           55           60
Lys Ile Asn Ser His Arg Trp Val Phe His Ala Leu Gly Arg Met Leu
65           70           75           80
Gln Pro Asp Met Val Val Leu Val Asp Val Gly Thr Lys Pro Gly His

```

				85						90					95				
Leu	Ala	Leu	Tyr	His	Leu	Trp	Gln	Ala	Phe	Tyr	His	Arg	Pro	Thr	Leu				
			100					105					110						
Gly	Gly	Ala	Cys	Gly	Glu	Ile	His	Ala	Met	Ile									
		115					120												

&lt;210&gt; 405

&lt;211&gt; 840

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 405

```

gaattcccg gcaccagctc gaagctggag cactttgtgt ctatcctgct gaagtgcttc
60
gactcgccct ggaccacgag ggccctgtcg gagacagtgg tggaggagag cgacccaag
120
ccggccttca gcaagatgaa tgggtccatg gacaaaaagt catcgaccgt cagtgaggac
180
gtggaggcca ccgtgcccac gctgcagcgg accaagtcac ggatcgagca gggatcgtg
240
gaccgctcag agacgggcgt gctggacaag aaggaggggg agcaagccaa ggcgctgttt
300
gagaaggtga agaagttccg gacccatgtg gaggaggggg acattgtgta ccgcctctac
360
atgcggcaga ccatcatcaa ggtgatcaag ttcacacctca tcatctgcta caccgtctac
420
tacgtgcaca acatcaagtt cgacgtggac tgcaccgtgg acattgagag cctgacgggc
480
taccgcacct accgctgtgc ccacccctg gccacactct tcaagatcct ggcgtccttc
540
tacatcagcc tagtcatctt ctacggcctc atctgcatgt atacactgtg gtggatgcta
600
cggcgctccc tcaagaagta ctcgtttgag tcgatccgtg aggagagcag ctacagcgac
660
atccccgacg tcaagaacga cttegccttc atgctgcacc tcattgacca atacgacccg
720
ctctactcca agcgcttcgc cgtcttcctg tcggaggtga gtgagaacaa gctgcggcag
780
ctgaacctca acaacgagtg gacgctggac aagctccggt acggagagaa gacaacgcgt
840

```

&lt;210&gt; 406

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 406

Leu	Ile	Cys	Met	Tyr	Thr	Leu	Trp	Trp	Met	Leu	Arg	Arg	Ser	Leu	Lys				
1				5					10					15					
Lys	Tyr	Ser	Phe	Glu	Ser	Ile	Arg	Glu	Glu	Ser	Ser	Tyr	Ser	Asp	Ile				
			20					25					30						
Pro	Asp	Val	Lys	Asn	Asp	Phe	Ala	Phe	Met	Leu	His	Leu	Ile	Asp	Gln				
		35				40						45							
Tyr	Asp	Pro	Leu	Tyr	Ser	Lys	Arg	Phe	Ala	Val	Phe	Leu	Ser	Glu	Val				

```

      50              55              60
Ser Glu Asn Lys Leu Arg Gln Leu Asn Leu Asn Asn Glu Trp Thr Leu
65              70              75              80
Asp Lys Leu Arg Tyr Gly Glu Lys Thr Thr Arg
      85              90

```

<210> 407  
 <211> 535  
 <212> DNA  
 <213> Homo sapiens

```

<400> 407
gcctattgta ccagctctcc agggctgggg acttgctaga gcagggttcc cagtgtcccc
60
aggctctact ttgctctgcc tggctctcagg gtgtagggga tggagagctg gacttccagc
120
ctgcttcttg gctgtctagg ggccaggggc tcgggacaca gagctcctgg aggccgagca
180
caagccttgg gcagaggtga ggcagagctc tgactgtttc attcgactac gttgccaagg
240
agatgctcgc tcggagtggg tgctctgggt ctgggattcc aaaccaagct gccttctctg
300
atgtggcctt agtgcctctg gcgatgtac cttggctctg cctggaccct ctctctcttc
360
caggcctctg tcccaccagg atgatgccta tccagagctc attgtcctct cccacttctc
420
ccccgagctt cccattccgt gtctctctgg agggcccatc atcatcctgg tggagggtgtt
480
gcactgagga ccacagcagc cctcgcatte ccacgggcaa aggggtatgt gtagg
535

```

<210> 408  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

```

<400> 408
Met Leu Ala Arg Ser Gly Cys Ser Gly Ser Gly Ile Pro Asn Gln Ala
1      5      10      15
Ala Phe Ser Asp Val Ala Leu Val Leu Trp Ala Asp Val Pro Trp Leu
      20      25      30
Cys Leu Asp Pro Leu Ser Leu Pro Gly Leu Cys Pro Thr Arg Met Met
      35      40      45
Pro Ile Gln Ser Ser Leu Ser Ser Pro Thr Ser Ser Pro Ser Phe Pro
      50      55      60
Phe Arg Val Ser Leu Glu Gly Pro Ser Ser Ser Trp Trp Arg Cys Cys
65      70      75      80
Thr Glu Asp His Ser Ser Pro Arg Ile Pro Thr Gly Lys Gly Val Cys
      85      90      95
Val

```

<210> 409  
 <211> 375

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 409

ngtgtcatgg gtgtctatac cagcgatgag gccaaactg ccaagacttt tggatttggg  
 60  
 ggacttccga ttacgactaa tatttctctt gccacaact tcaatatgga tgaaatttct  
 120  
 gatattgtct tccgtgtcaa tgataccagt ttgacaccaa ctgtgggacc agaattagct  
 180  
 agaaaattga ccgaaattgc tggctctcag caaggggagt atcaggtgtc agatgcgact  
 240  
 gcagccttcc aagaagtgca acaattgttc ggctttataa ctacgattat tagtgccatt  
 300  
 gcaggaattt ccctttttgt tggagggact ggtgttatga acatcatgct gggttcgggtg  
 360  
 acggagcgta cgcgt  
 375

&lt;210&gt; 410

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 410

Xaa	Val	Met	Gly	Val	Tyr	Thr	Ser	Asp	Glu	Ala	Lys	Thr	Ala	Lys	Thr
1			5						10					15	
Phe	Gly	Ile	Gly	Gly	Leu	Pro	Ile	Thr	Thr	Asn	Ile	Ser	Leu	Ala	Asn
			20					25					30		
Asn	Phe	Asn	Met	Asp	Glu	Ile	Ser	Asp	Ile	Val	Phe	Arg	Val	Asn	Asp
		35					40				45				
Thr	Ser	Leu	Thr	Pro	Thr	Val	Gly	Pro	Glu	Leu	Ala	Arg	Lys	Leu	Thr
		50				55					60				
Glu	Ile	Ala	Gly	Leu	Gln	Gln	Gly	Glu	Tyr	Gln	Val	Ser	Asp	Ala	Thr
65					70					75				80	
Ala	Ala	Phe	Gln	Glu	Val	Gln	Gln	Leu	Phe	Gly	Phe	Ile	Thr	Thr	Ile
			85						90					95	
Ile	Ser	Ala	Ile	Ala	Gly	Ile	Ser	Leu	Phe	Val	Gly	Gly	Thr	Gly	Val
			100					105						110	
Met	Asn	Ile	Met	Leu	Val	Ser	Val	Thr	Glu	Arg	Thr	Arg			
		115					120					125			

&lt;210&gt; 411

&lt;211&gt; 409

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 411

ccacatactt caccctcttc accccctcca cctactccac cacctggcag tcgccatcga  
 60  
 ggatgggacg caactccacg tccacatgct ccggaccacg cggcgtgtgg tggatgtgca  
 120  
 gcacgcggtc ggggccctt gagctcgaag gcgcggcgca tcgggcagtg ctgcgcggcc  
 180

tggtcgcagg gcacgtcgta ctggtgctgag acgcggaagc acttgtggcc gatgtaggcg  
 240  
 cgatcggctg tcccgaactg gcgctgatag gccgtgtaca caacacaaac tgttgtaactc.  
 300  
 ccggtccacc acgatcatgg gctgggactc gtgttccagg tggggggcca gggcttgggc.  
 360  
 ctgcggtgag cgcgtggggg ggatggggca tagcgtcggg gaggagggtg  
 409

<210> 412  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 412  
 Met Pro His Pro Pro His Ala Leu Thr Ala Gly Pro Ser Pro Gly Pro  
 1 5 10 15  
 Pro Pro Gly Thr Arg Val Pro Ala His Asp Arg Gly Gly Pro Gly Val  
 20 25 30  
 Gln Gln Phe Val Leu Cys Thr Arg Pro Ile Ser Ala Ser Ser Gly Gln  
 35 40 45  
 Pro Ile Ala Pro Thr Ser Ala Thr Ser Ala Ser Ala Ser Arg Thr Ser  
 50 55 60  
 Thr Thr Cys Pro Ala Thr Arg Pro Ala Ser Thr Ala Arg Cys Ala Ala  
 65 70 75 80  
 Pro Ser Ser Ser Arg Gly Pro Asp Arg Val Leu His Ile His His Thr  
 85 90 95  
 Pro Arg Gly Pro Glu His Val Asp Val Glu Leu Arg Pro Ile Leu Asp  
 100 105 110  
 Gly Asp Cys Gln Val Val Glu  
 115

<210> 413  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 413  
 ccgggcatcc caccaccggg tgtcatgaac caagtagtgg cccctatggt agggactcca  
 60  
 gcaccgggtg gaagtccata tggacaacag gtgggagttt tggggcctcc agggcagcag  
 120  
 gcaccacctc catatcccgg cccacatcca gctggacccc ctgtcatata gcagccaaca  
 180  
 acacccatgt ttgtagctcc cccccaaaag acccagcggc ttcttcactc agaggcctac  
 240  
 ctgaaataca ttgaaggact cagtgcggag tccaacagca ttagcaagtg ggatcagaca  
 300  
 ctggcagctc ggagacgcga cgtccatttg tcgaaagaac aggagagccg cctaccc  
 357

<210> 414  
 <211> 119  
 <212> PRT

<213> Homo sapiens

<400> 414

```

Pro Gly Ile Pro Pro Pro Gly Val Met Asn Gln Val Val Ala Pro Met
 1             5             10             15
Val Gly Thr Pro Ala Pro Gly Gly Ser Pro Tyr Gly Gln Gln Val Gly
          20             25             30
Val Leu Gly Pro Pro Gly Gln Gln Ala Pro Pro Pro Tyr Pro Gly Pro
          35             40             45
His Pro Ala Gly Pro Pro Val Ile Gln Gln Pro Thr Thr Pro Met Phe
          50             55             60
Val Ala Pro Pro Pro Lys Thr Gln Arg Leu Leu His Ser Glu Ala Tyr
65             70             75             80
Leu Lys Tyr Ile Glu Gly Leu Ser Ala Glu Ser Asn Ser Ile Ser Lys
          85             90             95
Trp Asp Gln Thr Leu Ala Ala Arg Arg Arg Asp Val His Leu Ser Lys
          100             105             110
Glu Gln Glu Ser Arg Leu Pro
          115

```

<210> 415

<211> 332

<212> DNA

<213> Homo sapiens

<400> 415

```

tctagagcca acttggttat cgtaatgaat agagagacta catctatatc aattattacg
60
ctctatagta atcatgaagc ttgggttata tgtatgacaa aaattgcaga aaaatcgaaa
120
caagaatatg gcgacttact aaaagaaaaa gaccatttac aagatatgga acagcttgag
180
atgactatcg tctcgatcca tacgccgtat ccgtccattg tcagaattca aggaaaaatc
240
aacacattac agccagagct ttggcaagct cccaatttag caattcgggt aattgtgagc
300
aatccgccag agggacaacc catctcacgc gt
332

```

<210> 416

<211> 102

<212> PRT

<213> Homo sapiens

<400> 416

```

Met Asn Arg Glu Thr Thr Ser Ile Ser Ile Ile Thr Leu Tyr Ser Asn
 1             5             10             15
His Glu Ala Trp Val Ile Cys Met Thr Lys Ile Ala Glu Lys Ser Lys
          20             25             30
Gln Glu Tyr Gly Asp Leu Leu Lys Glu Lys Asp His Leu Gln Asp Met
          35             40             45
Glu Gln Leu Glu Met Thr Ile Val Ser Ile His Thr Pro Tyr Pro Ser
          50             55             60
Ile Val Arg Ile Gln Gly Lys Ile Asn Thr Leu Gln Pro Glu Leu Trp

```



65		70		75		80									
Gln	Ala	Pro	Asn	Leu	Ala	Ile	Arg	Leu	Ile	Val	Ser	Asn	Pro	Pro	Glu
			85						90					95	
Gly	Gln	Pro	Ile	Ser	Arg										
			100												

<210> 417  
 <211> 483  
 <212> DNA  
 <213> Homo sapiens

<400> 417  
 gaattcctcg ccgtctctga ggtgggagag gacaccttg tgcgctccac cgagggagac  
 60  
 tacgcggcca acgtcgagggc cgtggtgacc ccagcaccgg cggagaaaga tattgagggc  
 120  
 cagccagaag cacaggaaca tgacaccccg ggtacagaga ccattgagaa gctggtcgaa  
 180  
 tgggccaggg ggcagggcat tactgtaaac cccgcgcttg tttgttatta taccctcaag  
 240  
 tgcattgatga tcaagctcca ccacccggcc gcggagagcg aagagcgcgga gtccgagttg  
 300  
 gcggcggttc tcatccctgg cgatcgagag ctggatgaaa agcgccttga ggccgcactc  
 360  
 gagccggttg agtttgagtt ggcaggggat aaggactttg cagacaatga cttcctagtc  
 420  
 aagggtatg ttggcccgcg cgctttgaac gccaatggca tcaaggtctt ggccgatcca  
 480  
 cgc  
 483

<210> 418  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 418  
 Glu Phe Leu Ala Val Ser Glu Val Gly Glu Asp Thr Phe Val Arg Ser  
 1 5 10 15  
 Thr Glu Gly Asp Tyr Ala Ala Asn Val Glu Ala Val Val Thr Pro Ala  
 20 25 30  
 Pro Ala Glu Lys Asp Ile Glu Gly Gln Pro Glu Ala Gln Glu His Asp  
 35 40 45  
 Thr Pro Gly Thr Glu Thr Ile Glu Lys Leu Val Glu Trp Ala Gln Gly  
 50 55 60  
 Ala Gly Ile Thr Val Asn Pro Arg Val Val Cys Tyr Tyr Thr Leu Lys  
 65 70 75 80  
 Cys Met Met Ile Lys Leu His His Pro Ala Ala Glu Ser Glu Glu Arg  
 85 90 95  
 Glu Ser Glu Leu Ala Ala Val Leu Ile Pro Gly Asp Arg Glu Leu Asp  
 100 105 110  
 Glu Lys Arg Leu Glu Ala Ala Leu Glu Pro Val Glu Phe Glu Leu Ala  
 115 120 125  
 Gly Asp Lys Asp Phe Ala Asp Asn Asp Phe Leu Val Lys Gly Tyr Val

130	135	140
Gly Pro Arg Ala Leu Asn Ala Asn Gly Ile Lys Val Leu Ala Asp Pro		
145	150	155
Arg		160

<210> 419  
 <211> 797  
 <212> DNA  
 <213> Homo sapiens

<400> 419  
 atttcacccc aggaaaacca gtaaggacca atgattaagc ccaagggttg gtaccgagtt  
 60  
 cggatccata agtaccggcc gccaggggtg ctggaatttg ggctcccccc ggtgaaaata  
 120  
 tccatgcagc cgcgttgtct taggtagaaa agggagactg ggggtgggtg ggctgagctc  
 180  
 aagcccctgc ctacatactt tagtagtaac gactcccgat ctgcatccaa cacatttacc  
 240  
 gaacttctag taagcgcccc ccgctgcaag cgaaagcaact ccctgccaa gaaacagatc  
 300  
 ttttccactt aaaattccca aactcagacc ttccactttt tactgaacaa aaagcgtgta  
 360  
 catgatctga agggttgaca tgacattttc taaattgggc gaatcaggaa gaggttgatg  
 420  
 aaaatccttg acgttttctg gggataggac atttgtgtgt gataacgttc ttaagtcgaa  
 480  
 ttccagtgtg gcagtgcacg cagattcttc attggtgtta gtgtatttcc atacggtatg  
 540  
 tattagtaca agaaatagtg ttccctttga cactcgaacc caaggagtgg tccgaggctt  
 600  
 tttgaggcaa cgtaggatca atgtctctga agcagatttg gtgaaggatg caggctctcat  
 660  
 aatttacaga gcaatcacag ctttctttga aacggagaaa ttagattcta tgaaattttg  
 720  
 tcagtgcaga tagatatgat gtggagaaac ggggaaaatt gagtacaaaa agatgaggct  
 780  
 tgaatgatgg ctggcca  
 797

<210> 420  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 420  
 Met Arg Pro Ala Ser Phe Thr Lys Ser Ala Ser Glu Thr Leu Ile Leu  
 1 5 10 15  
 Arg Cys Leu Lys Lys Pro Arg Thr Thr Pro Trp Val Arg Val Ser Lys  
 20 25 30  
 Gly Thr Leu Phe Leu Val Leu Ile His Thr Val Trp Lys Tyr Thr Asn  
 35 40 45  
 Thr Asn Glu Glu Ser Ala Cys Thr Ala Thr Leu Lys Phe Asp Leu Arg

50		55		60											
Thr	Leu	Ser	His	Thr	Asn	Val	Leu	Ser	Pro	Glu	Asn	Val	Lys	Asp	Phe
65					70					75					80
His	Gln	Pro	Leu	Pro	Asp	Ser	Pro	Asn	Leu	Glu	Asn	Val	Met	Ser	Thr
			85						90					95	
Leu	Gln	Ile	Met	Tyr	Thr	Leu	Phe	Val	Gln						
			100					105							

<210> 421  
 <211> 406  
 <212> DNA  
 <213> Homo sapiens

<400> 421  
 ggatccacca tgatggagcc caccaccca tcctcagtc acctgctgca gcttctccat  
 60  
 aacccaacac aggtcaatct tgtctcccta aacacacccat gtgctctcat gctgccatgg  
 120  
 tttgcctggg gccctctcta cctcctctgc tttctggaga acccttgcaac tcctcccaag  
 180  
 ccttcaagtt ggaaagtga cagtcagcat atgtctctag ctgagccctt actgcggtga  
 240  
 ttcataaaga ttggttcact gtcagccctt gaccagaacg tgtgttttag gaaagcagga  
 300  
 accaagtctt accaatgtct gtagtcccag cctccaccct ggcatagagt aggtgctcat  
 360  
 tgaatgtggg agggaaagag gagacacatg gaagggaatg tcattc  
 406

<210> 422  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 422	
Met Met Glu Pro Thr His Pro Ser Ser Val His Leu Leu Gln Leu Leu	
1	15
His Asn Pro Thr Gln Val Asn Leu Val Ser Leu Asn Thr Pro Cys Ala	
20	30
Leu Met Leu Pro Trp Phe Ala Trp Gly Pro Leu Tyr Leu Leu Cys Phe	
35	45
Leu Glu Asn Pro Cys Thr Pro Pro Lys Pro Ser Ser Trp Lys Val Asn	
50	60
Ser Gln His Met Ser Leu Ala Gln Pro Leu Leu Arg Gly Phe Met Lys	
65	80
Ile Gly Ser Leu Ser Ala Pro Asp Gln Asn Val Cys Phe Arg Lys Ala	
85	95
Gly Thr Lys Ser Tyr Gln Cys Leu	
100	

<210> 423  
 <211> 628  
 <212> DNA  
 <213> Homo sapiens

<400> 423  
 ngccacccta cgcctcgctt gcaatggcaa cttcagatcc cgggtggcac cgtagtctta  
 60  
 gagccaccgg ttctgagcgg ggaggacgac ggggttgggg cggaggaagg agagggagaa  
 120  
 ggagatgggg atttgctgac gcagacccaa gcccaaacgc cgactccagc acccgcttgg  
 180  
 ccggcgcccc cagccacacc gcgcttcttg gccctcgcaa atggctccct gttgggtgccc  
 240  
 ctcttgagtg ccaaggaggc gggcgtctac acttgccgtg cacacaatga gctgggcgcc  
 300  
 aactctacgt caatacgcgt ggcggtggca gcaaccgggc ccccaaaaca cgcgctggc  
 360  
 gccgggggag aaccgcgacg acaggccccg acctctgagc gcaagtccac agccaagggc  
 420  
 cggggcaaca gcgtcttgcc ttccaaacc gagggcaaaa tcaaaggcca aggcttgcc  
 480  
 aaggctcagca ttctcgggga gaccgagacg gagccggagg aggacacaag tgaggagag  
 540  
 gaggccgaag accagatcct cgcggaccgc gcggaggagc agcgtctgtg caacggggac  
 600  
 ccctctcggt acgtttctaa ccacgcgt  
 628

<210> 424  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 424  
 Xaa His Pro Thr Pro Arg Leu Gln Trp Gln Leu Gln Ile Pro Gly Gly  
 1 5 10 15  
 Thr Val Val Leu Glu Pro Pro Val Leu Ser Gly Glu Asp Asp Gly Val  
 20 25 30  
 Gly Ala Glu Glu Gly Glu Gly Glu Gly Asp Gly Asp Leu Leu Thr Gln  
 35 40 45  
 Thr Gln Ala Gln Thr Pro Thr Pro Ala Pro Ala Trp Pro Ala Pro Pro  
 50 55 60  
 Ala Thr Pro Arg Phe Leu Ala Leu Ala Asn Gly Ser Leu Leu Val Pro  
 65 70 75 80  
 Leu Leu Ser Ala Lys Glu Ala Gly Val Tyr Thr Cys Arg Ala His Asn  
 85 90 95  
 Glu Leu Gly Ala Asn Ser Thr Ser Ile Arg Val Ala Val Ala Ala Thr  
 100 105 110  
 Gly Pro Pro Lys His Ala Pro Gly Ala Gly Gly Glu Pro Asp Gly Gln  
 115 120 125  
 Ala Pro Thr Ser Glu Arg Lys Ser Thr Ala Lys Gly Arg Gly Asn Ser  
 130 135 140  
 Val Leu Pro Ser Lys Pro Glu Gly Lys Ile Lys Gly Gln Gly Leu Ala  
 145 150 155 160  
 Lys Val Ser Ile Leu Gly Glu Thr Glu Thr Glu Pro Glu Glu Asp Thr  
 165 170 175  
 Ser Glu Gly Glu Glu Ala Glu Asp Gln Ile Leu Ala Asp Pro Ala Glu

180 185 190  
 Glu Gln Arg Cys Gly Asn Gly Asp Pro Ser Arg Tyr Val Ser Asn His  
 195 200 205

Ala

<210> 425

<211> 471

<212> DNA

<213> Homo sapiens

<400> 425

ccggccgctcg aagactttga ggacgatgta gctcgcagcg cagcggttacg agccctggag  
 60  
 tacgtggatt tgaccccagg cactnaagtg cgcgtcatcg ccattgacac cgtgttccta  
 120  
 ggatcgtgca cgaatggccg tgaggactta cggctggctg ctgagggttcc caaaggacga  
 180  
 catatcgag cgggcaccg gatgctcgtc gccctggat ctgctcgtgt ccgtctgcag  
 240  
 gctatggagg aaggcctcga cgagatcggg tcccggtttg ctgacatctt tcgcaataac  
 300  
 tctgcgaaca atggcttggt actggctcag gttgaccccg aggtcgtcga agagttgtgg  
 360  
 gactttgccg agcagcatcc tggtagcag ctcaccgtct ccctcgagaa tcggacgac  
 420  
 aaccttcggg gtcgcacgac ctaccgttc catattgatg acgtcacgag t  
 471

<210> 426

<211> 157

<212> PRT

<213> Homo sapiens

<400> 426

Pro Ala Val Glu Asp Phe Glu Asp Asp Val Ala Arg Ser Ala Ala Leu  
 1 5 10 15  
 Arg Ala Leu Glu Tyr Val Asp Leu Thr Pro Gly Thr Xaa Val Arg Val  
 20 25 30  
 Ile Ala Ile Asp Thr Val Phe Leu Gly Ser Cys Thr Asn Gly Arg Glu  
 35 40 45  
 Asp Leu Arg Leu Ala Ala Glu Val Pro Lys Gly Arg His Ile Ala Ala  
 50 55 60  
 Gly Thr Arg Met Leu Val Ala Pro Gly Ser Ala Arg Val Arg Leu Gln  
 65 70 75 80  
 Ala Met Glu Glu Gly Leu Asp Glu Ile Gly Ser Arg Phe Ala Asp Ile  
 85 90 95  
 Phe Arg Asn Asn Ser Ala Asn Asn Gly Leu Leu Leu Ala Gln Val Asp  
 100 105 110  
 Pro Glu Val Val Glu Glu Leu Trp Asp Phe Ala Glu Gln His Pro Gly  
 115 120 125  
 Glu Gln Leu Thr Val Ser Leu Glu Asn Arg Thr Ile Asn Leu Pro Gly  
 130 135 140  
 Arg Thr Thr Tyr Pro Phe His Ile Asp Asp Val Thr Arg

145

150

155

&lt;210&gt; 427

&lt;211&gt; 546

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 427

ctagcggtag tagaaggat gcagtttgat cgcggtact tgtctccgta tttcatcaac  
60

aatcaagaaa caatgaatgc agagctagaa aaccatttta ttcttcttgt tgataagaaa  
120

atttctaata tccgtgactt gctaccaatt ttggaagggt ttgctaaagc atcgcgccca  
180

ttgttgatca ttgcggaaga cggtgaaggc gaagcgttgg caaccttggg tgtaaacact  
240

atgcgcggca tcgtaaaagt agcggcagcg aaagcgccag gttttggtga tcgccgtaaa  
300

gcaatgcttc aagacattgc tgtgctaacg ggttcaactg ttatttcaga agaaattggc  
360

attaagcttg aagaagcgac aattgaacag ttgggtacag cgaagcgctg tacattgaca  
420

aaagaaagta caacgattgt tgatggtgag ggtggtgcag ctaatattac tggtcgtggt  
480

gagcaaattc gtgcagaaat tgctaactct tcttctggct acgataaaga gaaattgcaa  
540

gaacgc

546

&lt;210&gt; 428

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 428

Leu Ala Val Val Glu Gly Met Gln Phe Asp Arg Gly Tyr Leu Ser Pro  
1 5 10 15

Tyr Phe Ile Asn Asn Gln Glu Thr Met Asn Ala Glu Leu Glu Asn Pro  
20 25 30

Phe Ile Leu Leu Val Asp Lys Lys Ile Ser Asn Ile Arg Asp Leu Leu  
35 40 45

Pro Ile Leu Glu Gly Val Ala Lys Ala Ser Arg Pro Leu Leu Ile Ile  
50 55 60

Ala Glu Asp Val Glu Gly Glu Ala Leu Ala Thr Leu Val Val Asn Thr  
65 70 75 80

Met Arg Gly Ile Val Lys Val Ala Ala Ala Lys Ala Pro Gly Phe Gly  
85 90 95

Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Val Leu Thr Gly Ser  
100 105 110

Thr Val Ile Ser Glu Glu Ile Gly Ile Lys Leu Glu Glu Ala Thr Ile  
115 120 125

Glu Gln Leu Gly Thr Ala Lys Arg Val Thr Leu Thr Lys Glu Ser Thr  
130 135 140

Thr Ile Val Asp Gly Ala Gly Val Ala Ala Asn Ile Thr Gly Arg Val

145		150		155		160									
Glu	Gln	Ile	Arg	Ala	Glu	Ile	Ala	Asn	Ser	Ser	Ser	Gly	Tyr	Asp	Lys
				165				170						175	
Glu	Lys	Leu	Gln	Glu	Arg										
			180												

&lt;210&gt; 429

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 429

gctagcagcc cttacaggag acgggctaata aataatgcag cagtggctcc gacaacttgc  
60  
ccgttgacgc cggtcacgga tccatttgc tttagtagac aggcgctcca aagtacacca  
120  
ctgggcagtt cgtccaaaag cagtccacct gtcttgcaag gccagcccc cgcaggggtt  
180  
tctcaacacc ccggtttgct tgtgccttac acacaatgca aaaaatagct ctcagggacc  
240  
ctgtgagccc ctgcctggac ctctgacaca gccagagca catgccagtc cgttttctgg  
300  
tgcatgaca cttcagcac ctctggggcc tgagatgaac aggagtgcag aggtcggtcc  
360  
cagttcagag cctgaagttc agactctgcc atatcttctt cactacattc caggagtgga  
420  
tcttg  
425

&lt;210&gt; 430

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 430

Met	Gln	Gln	Trp	Leu	Arg	Gln	Leu	Ala	Arg	Cys	Ser	Arg	Ser	Arg	Ile
1				5				10						15	
His	Leu	Leu	Leu	Val	Asp	Arg	Arg	Ser	Lys	Val	His	His	Trp	Ala	Val
			20					25					30		
Arg	Pro	Lys	Ala	Val	His	Leu	Ser	Cys	Lys	Ala	Gln	Pro	Pro	Gln	Gly
		35					40					45			
Phe	Leu	Asn	Thr	Pro	Val	Cys	Leu	Cys	Leu	Thr	His	Asn	Ala	Lys	Asn
	50				55					60					
Ser	Ser	Gln	Gly	Pro	Cys	Glu	Pro	Leu	Pro	Gly	Pro	Leu	Thr	Gln	Pro
65					70				75					80	
Arg	Ala	His	Ala	Ser	Pro	Phe	Ser	Gly	Ala	Leu	Thr	Pro	Ser	Ala	Pro
			85					90					95		
Pro	Gly	Pro	Glu	Met	Asn	Arg	Ser	Ala	Glu	Val	Gly	Pro	Ser	Ser	Glu
		100						105				110			
Pro	Glu	Val	Gln	Thr	Leu	Pro	Tyr	Leu	Pro	His	Tyr	Ile	Pro	Gly	Val
		115				120					125				
Asp	Pro														
	130														

<210> 431  
 <211> 192  
 <212> DNA  
 <213> Homo sapiens

<400> 431  
 ctagccatcc accagcgtac acacacggga gagaggccct acactggcct cgggtgcaac  
 60  
 cgccgcttcc gccagcgcac ggccctcgtc atccaccagc gcatccacac gggcgagaag  
 120  
 cctnaccgt gcccgactg cgagcggcgc ttctcctcct cctctcgctt ggtcagtcac  
 180  
 cggcgtgtgc ac  
 192

<210> 432  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<400> 432  
 Leu Ala Ile His Gln Arg Thr His Thr Gly Glu Arg Pro Tyr Thr Gly  
 1 5 10 15  
 Leu Gly Cys Asn Arg Arg Phe Arg Gln Arg Thr Ala Leu Val Ile His  
 20 25 30  
 Gln Arg Ile His Thr Gly Glu Lys Pro Xaa Pro Cys Pro Asp Cys Glu  
 35 40 45  
 Arg Arg Phe Ser Ser Ser Ser Arg Leu Val Ser His Arg Arg Val His  
 50 55 60

<210> 433  
 <211> 635  
 <212> DNA  
 <213> Homo sapiens

<400> 433  
 nngccggcgg ctgcgttggg atacgacgtc gctgcgattg ggcgtgagta tctttggtac  
 60  
 ctcatggagg agcgtggcgc gtatgcggag gccgccgcgc tcatgcccgt gctgctccgg  
 120  
 accgaccgag gcgcgtggga cacgtttgtg tgctgctacc tcgagcggca ccaaagggat  
 180  
 gcgatactcc cgcacattcc gacgcaggac cccagctga gtgagatggg gtacgatctc  
 240  
 gtgctggtgc atctgctgca gcacgatccc acgcagctgt tggcgacgct ccgcgcatgg  
 300  
 ccgagtcaca tctactcgaa gcaggcgggtg gctgcggcga tcggcgatca cgcacgaacc  
 360  
 agccgcacgc tgctcgagt cctcgcacag ctgtacatgg ccgcacatca gcccggaag  
 420  
 gctctgacat actacatgcg cctgcgtgat ccatgcgtgt ttgatctcat tcgcgagtac  
 480  
 gatctgctga tcgatgtgca gcaccacatc ggcacgctcg tcgagctcga tcaggaatgc  
 540



gccggctcca ctgagccgcg ctccagcgcg cttatgccgc tgctcgtgcc atataccac  
 600  
 tcgattccca tccagcgcgc catggcgcag ctcca  
 635

<210> 434  
 <211> 211  
 <212> PRT  
 <213> Homo sapiens

<400> 434  
 Xaa Pro Ala Ala Leu Gly Tyr Asp Val Ala Ala Ile Gly Arg Glu  
 1 5 10 15  
 Tyr Leu Trp Tyr Leu Met Glu Glu Arg Gly Ala Tyr Ala Glu Ala Ala  
 20 25 30  
 Ala Leu Met Pro Leu Leu Leu Arg Thr Asp Arg Gly Ala Trp Asp Thr  
 35 40 45  
 Phe Val Cys Cys Tyr Leu Glu Arg His Gln Arg Asp Ala Ile Leu Pro  
 50 55 60  
 His Ile Pro Thr Gln Asp Pro Gln Leu Ser Glu Met Val Tyr Asp Leu  
 65 70 75 80  
 Val Leu Val His Leu Leu Gln His Asp Pro Thr Gln Leu Leu Ala Thr  
 85 90 95  
 Leu Arg Ala Trp Pro Ser His Ile Tyr Ser Lys Gln Ala Val Ala Ala  
 100 105 110  
 Ala Ile Gly Asp His Ala Arg Thr Ser Arg Thr Leu Leu Glu Cys Leu  
 115 120 125  
 Ala Gln Leu Tyr Met Ala Ala His Gln Pro Gly Lys Ala Leu Thr Tyr  
 130 135 140  
 Tyr Met Arg Leu Arg Asp Pro Cys Val Phe Asp Leu Ile Arg Glu Tyr  
 145 150 155 160  
 Asp Leu Leu Ile Asp Val Gln His His Ile Gly Thr Leu Val Glu Leu  
 165 170 175  
 Asp Gln Glu Cys Ala Gly Ser Thr Glu Pro Arg Ser Ser Ala Leu Met  
 180 185 190  
 Pro Leu Leu Val Pro Tyr Thr His Ser Ile Pro Ile Gln Arg Ala Met  
 195 200 205  
 Ala Gln Leu  
 210

<210> 435  
 <211> 493  
 <212> DNA  
 <213> Homo sapiens

<400> 435  
 nncgtacgtt cgcgtatttt ccgcgcccg gaagctatcg ataataaagt tcaaccgctg  
 60  
 atccagcgtt agcaatggcg ggcacaggaa gggacttag gcatgcagaa agaaaagctt  
 120  
 tccgctctga tggatggtga atcggtcgac agcgagctgt tgagttctct gtcgcaagat  
 180  
 cgaacgcttc aacaaagctg gcagggtat cacctgatac gtgacacact gcgaggtgat  
 240

gtcgggcaag tgatgcatct cgacatcgcc gatcgcgtag ccgctgcact tgagaaagaa  
 300  
 cccgcccggc tgggtgccttc cgccgttcag gaatctcagc cgcagcctca cacctggcag  
 360  
 aaaatgccgt tctgggacaa agtgcgtccc tgggcgagcc agattacgca aatcggtatg  
 420  
 gcggcctgcg tgtcgctggc ggtgatcgtc ggcgtgcagc agtacaacca gccttctgcg  
 480  
 ccatcgaacg cgt  
 493

<210> 436

<211> 130

<212> PRT

<213> Homo sapiens

<400> 436

Met	Gln	Lys	Glu	Lys	Leu	Ser	Ala	Leu	Met	Asp	Gly	Glu	Ser	Phe	Asp
1				5					10					15	
Ser	Glu	Leu	Leu	Ser	Ser	Leu	Ser	Gln	Asp	Arg	Thr	Leu	Gln	Gln	Ser
		20						25					30		
Trp	Gln	Gly	Tyr	His	Leu	Ile	Arg	Asp	Thr	Leu	Arg	Gly	Asp	Val	Gly
		35					40					45			
Gln	Val	Met	His	Leu	Asp	Ile	Ala	Asp	Arg	Val	Ala	Ala	Ala	Leu	Glu
	50					55				60					
Lys	Glu	Pro	Ala	Arg	Leu	Val	Pro	Ser	Ala	Val	Gln	Glu	Ser	Gln	Pro
65					70					75				80	
Gln	Pro	His	Thr	Trp	Gln	Lys	Met	Pro	Phe	Trp	Asp	Lys	Val	Arg	Pro
			85						90					95	
Trp	Ala	Ser	Gln	Ile	Thr	Gln	Ile	Gly	Met	Ala	Ala	Cys	Val	Ser	Leu
		100						105					110		
Ala	Val	Ile	Val	Gly	Val	Gln	Gln	Tyr	Asn	Gln	Pro	Ser	Ala	Pro	Ser
		115					120						125		
Asn	Ala														
	130														

<210> 437

<211> 447

<212> DNA

<213> Homo sapiens

<400> 437

ntggtaaccg gtgtccctga tatggaccct gctgtggttag agcgtaaatt atttatttta  
 60  
 cgtaattatg taacacgcat ctgtttggag tctgttaatg gaattaagga caactttttac  
 120  
 attaatacat tctcatacaa aacaatcggt tataaagggtc agttaaccac tgaacaagtg  
 180  
 ccacaatatt tcttagattt acaaaatcca agtatggtaa cggcattagc gcttggttcac  
 240  
 tcacgtttct caacaaatac atttcctcgt tggcgtttag cacaaccatt ccgttacatc  
 300  
 gtcataatg gcgaaatcaa tacgggttcgc ggtaatatca attggatgaa agcacgtgaa  
 360

gcggttacttg aagctgaatt tttcactcgc tcagaattag atatgttaat gccaatctgt  
 420  
 acggatggta tgtctgactc ggcaagg  
 447

<210> 438  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 438  
 Xaa Val Thr Gly Val Pro Asp Met Asp Pro Ala Val Leu Glu Arg Lys  
 1 5 10 15  
 Leu Phe Ile Leu Arg Asn Tyr Val Thr Arg Ile Cys Leu Glu Ser Val  
 20 25 30  
 Asn Gly Ile Lys Asp Asn Phe Tyr Ile Asn Thr Phe Ser Tyr Lys Thr  
 35 40 45  
 Ile Val Tyr Lys Gly Gln Leu Thr Thr Glu Gln Val Pro Gln Tyr Phe  
 50 55 60  
 Leu Asp Leu Gln Asn Pro Ser Met Val Thr Ala Leu Ala Leu Val His  
 65 70 75 80  
 Ser Arg Phe Ser Thr Asn Thr Phe Pro Arg Trp Arg Leu Ala Gln Pro  
 85 90 95  
 Phe Arg Tyr Ile Ala His Asn Gly Glu Ile Asn Thr Val Arg Gly Asn  
 100 105 110  
 Ile Asn Trp Met Lys Ala Arg Glu Ala Leu Leu Glu Ala Glu Phe Phe  
 115 120 125  
 Thr Arg Ser Glu Leu Asp Met Leu Met Pro Ile Cys Thr Asp Gly Met  
 130 135 140  
 Ser Asp Ser Ala Arg  
 145

<210> 439  
 <211> 395  
 <212> DNA  
 <213> Homo sapiens

<400> 439  
 nacgcgtgaa gggagagtgg ggccgagccc caggaggctg tcctgcagca gctgcaccag  
 60  
 cttcccaggg gccggtgga cctggccacg caaagcctga cggaggagac ctgcagggcc  
 120  
 ctgggcaagc tgctgccgag ggagacgctg tgcacggagc tggtcctgag tgactgcatg  
 180  
 ctacgcgagg aagggggccac actgctgctc cgaggcctgt gtgccaacac cgtgctgcgc  
 240  
 tttctggact taaagggcaa caaccttcgg gctgcagggg ccgaggctct gggaaaactc  
 300  
 ctccaacaga acaagtccat tcagagcctc acgctggagt ggaacagcct gggcacgtgg  
 360  
 gacgatgcct tcgccacctt ctgcgggggc ctggc  
 395

<210> 440

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 440

```

Arg Glu Ser Gly Ala Glu Pro Gln Glu Ala Val Leu Gln Gln Leu His
 1           5           10          15
Gln Leu Pro Arg Gly Arg Leu Asp Leu Ala Thr Gln Ser Leu Thr Val
      20           25           30
Glu Thr Cys Arg Ala Leu Gly Lys Leu Leu Pro Arg Glu Thr Leu Cys
      35           40           45
Thr Glu Leu Val Leu Ser Asp Cys Met Leu Ser Glu Glu Gly Ala Thr
      50           55           60
Leu Leu Leu Arg Gly Leu Cys Ala Asn Thr Val Leu Arg Phe Leu Asp
65           70           75           80
Leu Lys Gly Asn Asn Leu Arg Ala Ala Gly Ala Glu Ala Leu Gly Lys
      85           90           95
Leu Leu Gln Gln Asn Lys Ser Ile Gln Ser Leu Thr Leu Glu Trp Asn
      100          105          110
Ser Leu Gly Thr Trp Asp Asp Ala Phe Ala Thr Phe Cys Gly Gly Leu
      115          120          125

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&lt;210&gt; 441

&lt;211&gt; 364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 441

```

gcccagtact acgtgaacat gttcgatgcc gagcagggct tcttcgacag gcgcagcccg
60
ggcggcgagt tccaagccgg cttggatccg gaatcctggg gcggtctggt cactgagacc
120
gacggttgga acttcgcctt ccacgctcca caggacggcc gggggctggc cgcgctctac
180
ggcgggtccga aaggcttgga gaacaagctc gatgcctttt tcgcgacgcc ggaaaacgcg
240
gacaagccgg cgtacggcgg aatccacgaa atggtcgagg ccagagcggc cgggatgggc
300
caattgggca tgtccaacga gccctcgac catattccct acatctacaa ctatgccggc
360
gcgc
364

```

&lt;210&gt; 442

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 442

```

Ala Gln Tyr Tyr Val Asn Met Phe Asp Ala Glu Gln Gly Phe Phe Asp
 1           5           10          15
Arg Arg Ser Pro Gly Gly Glu Phe Gln Ala Gly Leu Asp Pro Glu Ser
      20           25           30
Trp Gly Gly Leu Phe Thr Glu Thr Asp Gly Trp Asn Phe Ala Phe His

```

```

      35              40              45
Ala Pro Gln Asp Gly Arg Gly Leu Ala Ala Leu Tyr Gly Gly Pro Lys
      50              55              60
Gly Leu Glu Asn Lys Leu Asp Ala Phe Phe Ala Thr Pro Glu Asn Ala
65              70              75              80
Asp Lys Pro Ala Tyr Gly Gly Ile His Glu Met Val Glu Ala Arg Ala
      85              90              95
Val Arg Met Gly Gln Leu Gly Met Ser Asn Glu Pro Ser His His Ile
      100             105             110
Pro Tyr Ile Tyr Asn Tyr Ala Gly Ala
      115             120

```

&lt;210&gt; 443

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 443

```

accggttacg gctcagtga acaagagatg ttcgccaaca acctcgtgcg gatgccgctg
60
ctcatggtgc tggcaatccc cttcgccaag atcctctcga cgaccctgtc catcggatcg
120
ggcgggtccgg cggcggtcttc cggccctggc atgggtcatcg gcggagccac tggcgcgga
180
ctgtggcgcc tctcgagagg gctgccaggt atcccatcct caccgatgag tttcgtcatt
240
gtcggcatga tcgctgctt cgggtgcggtt gcccatgccc cactcggcgt gctgctcatg
300
gttggcgaga tgaccggaaa cctgtcgctg ctgcgtcctg gcatgatcgc cgtcgccgtc
360
gctggccgag ttgtcgggga cacttcgatc tacacctctc agctcaagga tcgctggag
420
ggcgacgcgt
430

```

&lt;210&gt; 444

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 444

```

Thr Gly Tyr Gly Ser Val Gln Gln Glu Met Phe Ala Asn Asn Leu Val
1      5      10      15
Arg Met Pro Leu Leu Met Val Leu Ala Ile Pro Phe Ala Lys Ile Leu
      20      25      30
Ser Thr Thr Leu Ser Ile Gly Ser Gly Gly Pro Ala Ala Ser Ser Gly
      35      40      45
Pro Gly Met Val Ile Gly Gly Ala Thr Gly Ala Ala Leu Trp Arg Leu
      50      55      60
Leu Glu Gly Leu Pro Gly Ile Pro Ser Ser Pro Met Ser Phe Val Ile
65      70      75      80
Val Gly Met Ile Ala Cys Phe Gly Ala Val Ala His Ala Pro Leu Gly
      85      90      95
Val Leu Leu Met Val Gly Glu Met Thr Gly Asn Leu Ser Leu Leu Ala

```

	100		105		110
Pro Gly Met	Ile Ala Val	Ala Val	Ala Gly Arg	Val Val	Gly Asp Thr
	115		120		125
Ser Ile Tyr	Thr Ser Gln	Leu Lys Asp	Arg Leu Glu	Gly Asp	Ala
	130		135		140

<210> 445  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 445  
 ccattggggct gcctagcctc tggggaggcc cctcagctgg tgacaccagc agggcagatt  
 60  
 tcttgcttta ttgctcacc tgtccagggt tccctctgtt tgtgaggag ctgctgccac  
 120  
 cttgggtcca ggaagcatga agctccgcag gtcagcctcc tgggtgggagg acttttcctt  
 180  
 agttttcttt gctcttctgc tctgagtcga gccctggctg gacctttgat cccttctctc  
 240  
 tttatcagga aattttctga ctttcttctt ttgccttttc aagatctgtg atgccatctc  
 300  
 caagtgggaa caagccatga aggagctgca ccccgaaag tctgagggtg ggacacgcgt  
 360

<210> 446  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 446  
 Met Ala Cys Ser His Leu Glu Met Ala Ser Gln Ile Leu Lys Arg Gln  
 1 5 10 15  
 Lys Lys Lys Val Arg Lys Phe Pro Asp Lys Glu Arg Arg Asp Gln Arg  
 20 25 30  
 Ser Ser Gln Gly Trp Thr Gln Ser Arg Arg Ala Lys Lys Thr Lys Glu  
 35 40 45  
 Lys Ser Ser His Gln Glu Ala Asp Leu Arg Ser Phe Met Leu Pro Gly  
 50 55 60  
 Pro Lys Val Ala Ala Ala Pro Ser Gln Thr Glu Gly Thr Leu Asp Arg  
 65 70 75 80  
 Val Ser Asn Lys Ala Arg Asn Leu Pro Cys Trp Cys His Gln Leu Arg  
 85 90 95  
 Gly Leu Pro Arg Gly  
 100

<210> 447  
 <211> 487  
 <212> DNA  
 <213> Homo sapiens

<400> 447  
 acgcgtgaag ggggaaattg ctcgtgccac ctgaggatta atcattaccc tggaaccctt  
 60

cccaaggcca tcaaggaaca cgcacccctt accagacctt ccagctgctg ggggctctcc  
 120  
 gagtgaggct gaggtcatgg agaaggaat ggggggcccc catggccagc tggacctgat  
 180  
 cactgcctcc ccactcagcc acagccctca gggccctgtg ccagtccaga agccattca  
 240  
 gggacacctt tggccaatgt tctgtttcat ctgcgaggca accttcccca gtgccccaac  
 300  
 catagcgttt tccccaaaac accctcagga aggagggacc actacctgtg cagggggggc  
 360  
 caggagcctc ctgagagcct catatgggga ggaagtggta ccatctcacc cccattgcct  
 420  
 ttctctccta cttccacctg gccagcttcc ctcagtgcc ctcctgcctc agtgccccctt  
 480  
 cacgct  
 487

<210> 448

<211> 117

<212> PRT

<213> Homo sapiens

<400> 448

Met	Glu	Lys	Gly	Met	Gly	Gly	Pro	His	Gly	Gln	Leu	Asp	Leu	Ile	Thr
1				5					10					15	
Ala	Ser	Pro	Leu	Ser	His	Ser	Pro	Gln	Gly	Pro	Val	Pro	Val	Gln	Lys
			20					25					30		
Pro	Ile	Gln	Gly	His	Leu	Trp	Pro	Met	Phe	Cys	Phe	Ile	Cys	Glu	Ala
		35					40					45			
Thr	Phe	Pro	Ser	Ala	Pro	Thr	Ile	Ala	Phe	Ser	Pro	Lys	His	Pro	Gln
	50					55					60				
Glu	Gly	Gly	Thr	Thr	Thr	Cys	Ala	Gly	Gly	Ala	Arg	Ser	Leu	Leu	Arg
65					70				75					80	
Ala	Ser	Tyr	Gly	Glu	Glu	Val	Val	Pro	Ser	His	Pro	His	Cys	Leu	Ser
				85				90					95		
Leu	Leu	Leu	Pro	Pro	Gly	Gln	Leu	Pro	Ser	Val	Pro	Leu	Leu	Pro	Gln
			100				105					110			
Cys	Pro	Phe	Thr	Arg											
			115												

<210> 449

<211> 353

<212> DNA

<213> Homo sapiens

<400> 449

gagctcagcc agttggagtt tgagaagcgg cagctgcaca gggacttggg gcaggccaag  
 60  
 gagaaggggg agcgggcaga gaagctggag agggagctac agcgactcca ggaggagaac  
 120  
 gggaggctgg ccaggaaggt gacctccctg gagacagcca ccgagaaagt cgaggccctg  
 180  
 gacatgaga gccagggcct gcagctggag aaccggactc tgaggaagtc tctggacacc  
 240

ttgcagaacg tgtccctgca gcttgagggc ctggagcgtg acaacaagca gctggacgca  
 300  
 gagaacctgg agctgcgcag gctggtggag accatgcgga gacgacaacg cgt  
 353

<210> 450  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 450  
 Glu Leu Ser Gln Leu Glu Phe Glu Lys Arg Gln Leu His Arg Asp Leu  
 1 5 10 15  
 Glu Gln Ala Lys Glu Lys Gly Glu Arg Ala Glu Lys Leu Glu Arg Glu  
 20 25 30  
 Leu Gln Arg Leu Gln Glu Glu Asn Gly Arg Leu Ala Arg Lys Val Thr  
 35 40 45  
 Ser Leu Glu Thr Ala Thr Glu Lys Val Glu Ala Leu Glu His Glu Ser  
 50 55 60  
 Gln Gly Leu Gln Leu Glu Asn Arg Thr Leu Arg Lys Ser Leu Asp Thr  
 65 70 75 80  
 Leu Gln Asn Val Ser Leu Gln Leu Glu Gly Leu Glu Arg Asp Asn Lys  
 85 90 95  
 Gln Leu Asp Ala Glu Asn Leu Glu Leu Arg Arg Leu Val Glu Thr Met  
 100 105 110  
 Arg Arg Arg Gln Arg  
 115

<210> 451  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens

<400> 451  
 gtgatgcggc tgactaagcc tactttattc accaatatcc cagtaacatg tgaagagaaa  
 60  
 gacttacctg gagatctctt taaccagctg atgagagatg atccttcaac cgттаатггт  
 120  
 gcagaagttt таатгттггг агaaатгctg actttaccac agaattttgg gaatatattt  
 180  
 ttgggagaga ccttttccag ttatatcagc gttcataatg atagcaatca agttgtaaaa  
 240  
 gacatattag таaaagctga tcttcagaca agttctcagc gtttaaатct ttcagcctcc  
 300  
 аатгctgcag тггctgaact таaaccggat тгттгтattg atgatgtcat acatcatgaa  
 360  
 gtcaaagaaa ttggaacaca catcttggtgа тгтгctgtga gttatacaac tcaggctgga  
 420  
 gaaaaaatgt atttcagaaa attt  
 444

<210> 452  
 <211> 148  
 <212> PRT



<213> Homo sapiens

<400> 452

```

Val Met Arg Leu Thr Lys Pro Thr Leu Phe Thr Asn Ile Pro Val Thr
 1           5           10           15
Cys Glu Glu Lys Asp Leu Pro Gly Asp Leu Phe Asn Gln Leu Met Arg
      20           25           30
Asp Asp Pro Ser Thr Val Asn Gly Ala Glu Val Leu Met Leu Gly Glu
      35           40           45
Met Leu Thr Leu Pro Gln Asn Phe Gly Asn Ile Phe Leu Gly Glu Thr
      50           55           60
Phe Ser Ser Tyr Ile Ser Val His Asn Asp Ser Asn Gln Val Val Lys
65           70           75           80
Asp Ile Leu Val Lys Ala Asp Leu Gln Thr Ser Ser Gln Arg Leu Asn
      85           90           95
Leu Ser Ala Ser Asn Ala Ala Val Ala Glu Leu Lys Pro Asp Cys Cys
      100          105          110
Ile Asp Asp Val Ile His His Glu Val Lys Glu Ile Gly Thr His Ile
      115          120          125
Leu Val Cys Ala Val Ser Tyr Thr Thr Gln Ala Gly Glu Lys Met Tyr
      130          135          140
Phe Arg Lys Phe
145

```

<210> 453

<211> 373

<212> DNA

<213> Homo sapiens

<400> 453

```

gctagctctg accccacctt tgccaagtgg cactaggggtg gccaatgggg actaggggtg
60
tataattgga aaatacagtc tcccctgttg tccaagaaag gcccagatg acctggggct
120
tgaaaggcac tcccgtctgg tgcttcctgg gagcaggtgg ggggcagcgg ggcggcgggg
180
cctgtctgtg ctgagcatcc ccagctccag ggcaggtgct gggctctgag cccactggt
240
gcgttttggg atgggctggc ctgcgcggct gtcgtttcag agcacacaga agagaccctg
300
ccacaggagg agtgggagga gaagctgttg atgttcctgc gagacaccct ggccatcatt
360
tctgacaacg cgt
373

```

<210> 454

<211> 108

<212> PRT

<213> Homo sapiens

<400> 454

```

Met Met Ala Arg Val Ser Arg Arg Asn Ile Asn Ser Phe Ser Ser His
 1           5           10           15
Ser Ser Cys Gly Arg Val Ser Ser Val Cys Ser Glu Thr Thr Ala Ala

```

```

          20          25          30
Gln Ala Ser Pro Ser Gln Asn Ala Pro Val Gly Leu Arg Ala Gln His
          35          40          45
Leu Pro Trp Ser Trp Gly Cys Ser Ala Gln Thr Gly Pro Ala Ala Pro
          50          55          60
Leu Pro Pro Thr Cys Ser Gln Glu Ala Pro Ser Gly Ser Ala Phe Gln
65          70          75          80
Ala Pro Gly His Leu Gly Pro Phe Leu Asp Asn Arg Gly Asp Cys Ile
          85          90          95
Phe Gln Leu Tyr Asn Pro Ser Pro His Trp Pro Pro
          100          105

```

&lt;210&gt; 455

&lt;211&gt; 602

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 455

```

cctaggcaaa gcatgcccac cctacctccc cttaccctta cccttcattt tcccctaagc
60
accatcacc accgatgtta ctgtatgtgt ttgcttacgc tgacagccca ccaccacac
120
tggaatgtcc gcacgacaaa ggcaggactc ttggctgcct tagccacagc tggatcccca
180
gagctttgta ggggtgttggg cacagagtgg agtgggtact taataagtat ctgtggaatg
240
aacatgtaca gagtgaagcc ctgtgcccag aacaggctca aaataagctc aattcctttc
300
cttgccactt actaagtcct ttttctctcg cccctctca ctgacctggt tttgatgcca
360
gacagcacag atgggctagg gaggcagggtg gggaagcaga gatctgcgtc tcttggagct
420
ggagctggtg ggtggggctc cttcctggtg ctgcggaggc tcattgggga ggtggcagcg
480
acccctcag gagcctctgt cgctgcact cagatctgtg cctttccaca gcgcccggag
540
gaagacttgc tcaggagata aattcaaaga caacaggaag ctggacgtgg tggctcacgc
600
gt
602

```

&lt;210&gt; 456

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 456

```

Met Pro Thr Leu Pro Pro Leu Thr Leu Thr Leu His Phe Pro Leu Ser
1          5          10          15
Thr His His His Arg Cys Tyr Cys Met Cys Leu Leu Thr Leu Thr Ala
20          25          30
His His Pro His Trp Asn Val Arg Thr Thr Lys Ala Gly Leu Leu Ala
35          40          45
Ala Leu Ala Thr Ala Gly Ser Pro Glu Leu Cys Arg Val Leu Gly Thr

```

50                      55                      60  
 Glu Trp Ser Gly Tyr Leu Ile Ser Ile Cys Gly Met Asn Met Tyr Arg  
 65                      70                      75                      80  
 Val Lys Pro Cys Ala Gln Asn Arg Leu Lys Ile Ser Ser Ile Pro Phe  
                     85                      90                      95  
 Leu Ala Thr Tyr  
                     100

<210> 457  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 457  
 acgcgtcatg tggatattcc tgggaggttc ccaggaacgt ttctggacgg gccccgacc  
 60  
 agaggtcagg gaacttttct tattattctg cacgtgccca gggatagtca aaccaggtct  
 120  
 tcccccttctg ctggccgcaa cacgccagcc gccgccacga ccgcacgctg aattcatgac  
 180  
 ccgacacgcg acgtggcagc gagcacaccc accgctagga gaaagagcgc tcatcgaaga  
 240  
 tcgttttctg tccactggcc agcgccacta tgatcaggtg gggatatccgc ccggcggcgg  
 300  
 gagcaccggg acgccggggc gccg  
 324

<210> 458  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 458  
 Met Trp Ile Phe Leu Gly Gly Ser Gln Glu Arg Phe Trp Thr Gly Pro  
 1                      5                      10                      15  
 Arg Pro Glu Val Arg Glu Leu Phe Leu Leu Phe Cys Thr Cys Pro Gly  
                     20                      25                      30  
 Ile Val Lys Pro Gly Leu Pro Leu Leu Leu Ala Ala Thr Arg Gln Pro  
                     35                      40                      45  
 Pro Pro Arg Pro His Ala Glu Phe Met Thr Arg His Ala Thr Trp Gln  
                     50                      55                      60  
 Arg Ala His Pro Pro Leu Gly Glu Arg Ala Leu Ile Glu Asp Arg Phe  
 65                      70                      75                      80  
 Leu Ser Thr Gly Gln Arg His Tyr Asp Gln Val Gly Tyr Pro Pro Gly  
                     85                      90                      95  
 Gly Gly Ser Thr Gly Thr Pro Gly Arg  
                     100                      105

<210> 459  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<400> 459

acgcgttcat tcggcatctg cttccatgga tttcctgcgg ggaggcgcgg ccgagagtgc  
60  
gggtgtcgaa cacgacactt cagtgatcgt ttcaaccacc ggccgagatg ggtcctgacg  
120  
ctgggcttca agccgcttgc gctcgcgctc ctgatctcgg gcagcgcgat tccgggtggtt  
180  
tatgctgccg gcagacgact gcgcacgccc ctcacgaggt atctgcacat gcttaaaggg  
240  
agaggcctca cccgacagct gggcatcgga tttacgaagc ccacgacgaa tcttcctcgc  
300  
ctcctcaaag ccgatcatcg gcatgccagg tttgtggttg aatgcttcga tcaacacact  
360  
aggatcggtg gggccacca catacaccga gcggcaatcg agcggatacg acctc  
415

<210> 460

<211> 105

<212> PRT

<213> Homo sapiens

<400> 460

Met	Pro	Met	Ile	Gly	Phe	Glu	Glu	Ala	Arg	Lys	Ile	Arg	Arg	Gly	Leu
1				5					10					15	
Arg	Lys	Ser	Asp	Ala	Gln	Leu	Ser	Gly	Glu	Ala	Ser	Pro	Phe	Lys	His
			20					25					30		
Val	Gln	Ile	Pro	Arg	Glu	Gly	Arg	Ala	Gln	Ser	Ser	Ala	Gly	Ser	Ile
			35				40					45			
Asn	His	Arg	Asn	Arg	Ala	Ala	Arg	Asp	Gln	Glu	Arg	Glu	Arg	Lys	Arg
			50			55					60				
Leu	Glu	Ala	Gln	Arg	Gln	Asp	Pro	Ser	Arg	Pro	Val	Val	Glu	Thr	Ile
65				70					75				80		
Thr	Glu	Val	Ser	Cys	Ser	Thr	Pro	Ala	Leu	Ser	Ala	Ala	Pro	Pro	Arg
			85					90					95		
Arg	Lys	Ser	Met	Glu	Ala	Asp	Ala	Glu							
			100					105							

<210> 461

<211> 357

<212> DNA

<213> Homo sapiens

<400> 461

acgcgttcga ggtcggctaa atttatcatg cgcacgacaa agagagtagt ggctcacaac  
60  
cggttcacat gcatgatgac aaaaactggc agaataagagt tgatgtcatc ccgtctacca  
120  
gctcctagaa ccagctcaga gagtcccggt gtcggtaccg tcgagactca gtacacaact  
180  
gtcgcgatac cggacgaccc tcttcatctg gttgcagatg ggcgtctcaa tcacgtcact  
240  
gtcgcttacg aaacctacgg gaagctcaat acgtccagcg acaatgcggt ctatacctgt  
300  
catgcgctta ctgggtgatgc ccatgcagcc ggatttcacc ccggtgtagt ccgtccg  
357

<210> 462  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 462  
 Thr Arg Ser Arg Ser Ala Lys Phe Ile Met Arg Thr Thr Lys Arg Val  
 1 5 10 15  
 Val Ala His Asn Arg Val Thr Cys Met Met Thr Lys Thr Gly Arg Ile  
 20 25 30  
 Glu Leu Met Ser Ser Arg Leu Pro Ala Pro Arg Thr Ser Ser Glu Ser  
 35 40 45  
 Pro Gly Val Gly Thr Val Glu Thr Gln Tyr Thr Thr Val Ala Ile Pro  
 50 55 60  
 Asp Asp Pro Leu His Leu Val Ala Asp Gly Arg Leu Asn His Val Thr  
 65 70 75 80  
 Val Ala Tyr Glu Thr Tyr Gly Lys Leu Asn Thr Ser Ser Asp Asn Ala  
 85 90 95  
 Val Tyr Thr Cys His Ala Leu Thr Gly Asp Ala His Ala Ala Gly Phe  
 100 105 110  
 His Pro Gly Val Val Arg Pro  
 115

<210> 463  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 463  
 gtgcacgggg tatgcgaggg atgcggcatt gccaccaatg ccgctgacct gcgcagatac  
 60  
 gaggcagctg gtgacgatga agtgggtgcga tgcgaggaat gcgatcgtat cctgggtgcgt  
 120  
 accggagagt ccatctgagc ccttcttctgtg gcgggtgatgc cgggatatcc gtagaattag  
 180  
 cggtcggacg agccatccgg gtgatcgagg cagcgggtgag ttgtcgagga aagtccgggc  
 240  
 tccatagagc aggggtggtgg gtaacgccc cccgggggtga cccgcgggaa agtgccacag  
 300  
 agaacagact gccggtttcg agccggtgag ggtgaaacgg tggagtaagt gcccaccgag  
 360  
 tcatcggtga cggtgacggc atggcaaacc ccacctggag caaggccaag aagaccgtga  
 420  
 ggtcgaggac gcgt  
 434

<210> 464  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 464  
 Met Pro Ser Pro Ser Pro Met Thr Arg Trp Ala Leu Thr Pro Pro Phe

```

      1             5             10             15
His Pro His Arg Leu Glu Thr Gly Ser Leu Phe Ser Val Ala Leu Ser
      20             25             30
Arg Gly Ser Pro Arg Val Gly Val Thr His His Pro Ala Leu Trp Ser
      35             40             45
Pro Asp Phe Pro Arg Gln Leu Thr Ala Ala Ala Ile Thr Arg Met Ala
      50             55             60
Arg Pro Thr Ala Asn Ser Thr Asp Ile Pro Ala Ser Pro Pro Gln Glu
      65             70             75             80
Gly Leu Arg Trp Thr Leu Arg Tyr Ala Pro Gly Tyr Asp Arg Ile Pro
      85             90             95
Arg Ile Ala Pro Leu His Arg His Gln Leu Pro Arg Ile Cys Ala Gly
      100            105            110
Gln Arg His Trp Trp Gln Cys Arg Ile Pro Arg Ile Pro Arg Ala
      115            120            125

```

<210> 465  
 <211> 438  
 <212> DNA  
 <213> Homo sapiens

```

<400> 465
gatcatttag aatttatgga agaagctgat gtgaaagcta tgggtcaaatac tggcactgtg
60
gctgtattgc taccaggagc attttacacc ttgaaagaaa ctcaacttcc accgatgaat
120
ttgttacgtc agtacggagt agacattgct atttcgacgg atgctaatacc agggacgtcg
180
ccagcggttat cattacgggtt aatgatgaat atggcatgta ccttgtttgg tatgacacct
240
gaaaccgccc ttgcaggggtt aacaattcat gcggcaaaag cgttggggat tagcgattct
300
catggcactt tagaagttgg caaggtagct gattttgtct gctgggatgt ggaaagcccc
360
ggtgaacttt gttattgggtt aggagagcag ttagtaaagc aacgtattca gcacggagta
420
tcccatgaat aatctaga
438

```

<210> 466  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

```

<400> 466
Asp His Leu Glu Phe Met Glu Glu Ala Asp Val Lys Ala Met Val Lys
      1             5             10             15
Ser Gly Thr Val Ala Val Leu Leu Pro Gly Ala Phe Tyr Thr Leu Lys
      20             25             30
Glu Thr Gln Leu Pro Pro Met Asn Leu Leu Arg Gln Tyr Gly Val Asp
      35             40             45
Ile Ala Ile Ser Thr Asp Ala Asn Pro Gly Thr Ser Pro Ala Leu Ser
      50             55             60
Leu Arg Leu Met Met Asn Met Ala Cys Thr Leu Phe Gly Met Thr Pro

```

```

65          70          75          80
Glu Thr Ala Leu Ala Gly Val Thr Ile His Ala Ala Lys Ala Leu Gly
            85          90          95
Ile Ser Asp Ser His Gly Thr Leu Glu Val Gly Lys Val Ala Asp Phe
            100         105         110
Val Cys Trp Asp Val Glu Ser Pro Gly Glu Leu Cys Tyr Trp Leu Gly
            115         120         125
Glu Gln Leu Val Lys Gln Arg Ile Gln His Gly Val Ser His Glu
            130         135         140

```

<210> 467  
 <211> 460  
 <212> DNA  
 <213> Homo sapiens

```

<400> 467
ntttccctgg ctattggcca tgtgggacac aacgttccgc ctaccccaga gcggttaagc
60
tgcacccctg caccttcttc tcccaccgct tcaaagccac agtgaggaac ttcggagctt
120
ctcgcagtga agatggcggt ggaggaatgg atgccctggc tagaagaggc ggaatatctg
180
ttgattgtgt ggaccgacca caaaaacctg gagtatctcc acacaaccaa gtgcctcaac
240
tccaggcaag caagaagggc ccagctgttt acctgggtcc acttttccct ctccaccgg
300
ccgggggtcca agaacatcag gctggatgcc ctttcttgcc actttatggg catgggcccc
360
ttcctccagg cttgcctgtc acccggggtc ccgtcaaacc ctggccttcg tgcgacaaca
420
ctcttggtgc cttctatggt tctgtatggt gccgcaattg
460

```

<210> 468  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

```

<400> 468
Gly Thr Ser Glu Leu Leu Ala Val Lys Met Ala Leu Glu Glu Trp Met
1          5          10         15
Pro Trp Leu Glu Glu Ala Glu Tyr Leu Leu Ile Val Trp Thr Asp His
20         25         30
Lys Asn Leu Glu Tyr Leu His Thr Thr Lys Cys Leu Asn Ser Arg Gln
35         40         45
Ala Arg Arg Ala Gln Leu Phe Thr Trp Phe His Phe Ser Leu Ser Tyr
50         55         60
Arg Pro Gly Ser Lys Asn Ile Arg Leu Asp Ala Leu Ser Cys His Phe
65         70         75         80
Met Gly Met Gly Pro Phe Leu Gln Ala Cys Leu Ser Pro Gly Leu Pro
85         90         95
Ser Asn Pro Gly Leu Arg Ala Thr Thr Leu Leu Val Pro Ser Met Val
100        105        110
Leu Tyr Val Ala Ala Ile

```

115

<210> 469  
 <211> 381  
 <212> DNA  
 <213> Homo sapiens

<400> 469  
 cttgtgcaca cggtattttt ccaatacaaa tagtttaaaa agtaaaactcc aaatacctat  
 60  
 aagccccctc aaagcacctt ccaaatatga accttggttaa tgcccaaggt ccagaggggt  
 120  
 cccccagaaa ggcccaggag cctggggcat gggaaagctg tcgggggtccc catgctgact  
 180  
 ccctggactc caagcgatat tccataaagc cagggcctcc tggctgcggg agggaggcct  
 240  
 tgacccaaaa tccattcggc cctggatact ggagaggcag aggcctctgc tgatgagaag  
 300  
 ccctgagttc ctggctagct gtggttaacc acaaaaaatg cgggggggtga tgattttcga  
 360  
 agtccatcgg caaagaaaga c  
 381

<210> 470  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 470  
 Met Asp Phe Glu Asn His His Pro Pro His Phe Leu Trp Leu Thr Thr  
 1 5 10 15  
 Ala Ser Gln Glu Leu Arg Ala Ser His Gln Gln Arg Pro Leu Pro Leu  
 20 25 30  
 Gln Tyr Pro Gly Pro Asn Gly Phe Trp Val Lys Ala Ser Leu Pro Gln  
 35 40 45  
 Pro Gly Gly Pro Gly Phe Met Glu Tyr Arg Leu Glu Ser Arg Glu Ser  
 50 55 60  
 Ala Trp Gly Pro Arg Gln Leu Ser His Ala Pro Gly Ser Trp Ala Phe  
 65 70 75 80  
 Leu Gly Asp Pro Ser Gly Pro Trp Ala Leu Thr Arg Phe Ile Phe Gly  
 85 90 95  
 Arg Cys Phe Glu Gly Ala Tyr Arg Tyr Leu Glu Phe Thr Phe  
 100 105 110

<210> 471  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 471  
 accggtgact acctgcagca ctggattgac atgggtaaaa agggcggcga ccgcatgccca  
 60  
 gaggtcttcc tgggttaactg gttccgccgc ggcgacgatg gccgcttcct gtggccgngg  
 120



cttggcgaaa acttcccggg cctanagtgg atcatcgacc gcattgaagg caacgtagag  
 180  
 gccgaggaca cgggtggtcgg acgcaccgcc cgcgccgagg acatcgactt gcaaggcctt  
 240  
 gacttcgatg tcgaogacgt tcgcgccgca ctgcgccgtg acccgaagga atgggaaggg  
 300  
 gatatgcaag acaacgccga gtacctgaac ttcttgggct cccgcgtgcc cgaggaagtg  
 360  
 tggaaccagt tccgcgcc  
 378

<210> 472

<211> 126

<212> PRT

<213> Homo sapiens

<400> 472

Thr	Gly	Asp	Tyr	Leu	Gln	His	Trp	Ile	Asp	Met	Gly	Lys	Lys	Gly	Gly
1				5				10						15	
Asp	Arg	Met	Pro	Glu	Val	Phe	Leu	Val	Asn	Trp	Phe	Arg	Arg	Gly	Asp
			20				25						30		
Asp	Gly	Arg	Phe	Leu	Trp	Pro	Xaa	Leu	Gly	Glu	Asn	Phe	Pro	Val	Leu
		35					40					45			
Xaa	Trp	Ile	Ile	Asp	Arg	Ile	Glu	Gly	Asn	Val	Glu	Ala	Glu	Asp	Thr
		50				55					60				
Val	Val	Gly	Arg	Thr	Ala	Arg	Ala	Glu	Asp	Ile	Asp	Leu	Gln	Gly	Leu
65				70					75					80	
Asp	Phe	Asp	Val	Asp	Asp	Val	Arg	Ala	Ala	Leu	Ala	Val	Asp	Pro	Lys
			85						90					95	
Glu	Trp	Glu	Gly	Asp	Met	Gln	Asp	Asn	Ala	Glu	Tyr	Leu	Asn	Phe	Leu
			100					105					110		
Gly	Ser	Arg	Val	Pro	Glu	Glu	Val	Trp	Asn	Gln	Phe	Arg	Ala		
			115				120						125		

<210> 473

<211> 339

<212> DNA

<213> Homo sapiens

<400> 473

accggttggt gggggaaggg acccatccca tgccacctgt cctagaaaat gtttcccctt  
 60  
 gttgagcagc tgctggatct agggctgctg ggtctaagtc caaaaaggga aaaaggaaaa  
 120  
 aggcaccaag taaaagaagg gggaagctgc caaaaccccc cctgccaaaa ctctcccacc  
 180  
 ctgcttccat ttccctctcc agggaacagg tgtacctccc ctctccctg tcctcctcag  
 240  
 atgccccagg ggctctctac ttcattcctg ccgacctgc caggagtggc ctcaggggta  
 300  
 gaggctccta gttggagaat ttgcttgag gaaggtgaa  
 339

<210> 474

<211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 474  
 Met Phe Pro Leu Val Glu Gln Leu Leu Asp Leu Gly Leu Leu Gly Leu  
 1 5 10 15  
 Ser Pro Lys Arg Glu Lys Gly Lys Arg His Gln Val Lys Glu Gly Gly  
 20 25 30  
 Ser Cys Gln Asn Pro Pro Cys Gln Asn Ser Pro Thr Leu Leu Pro Phe  
 35 40 45  
 Pro Ser Pro Gly Asn Arg Cys Thr Ser Pro Pro Pro Cys Pro Pro Gln  
 50 55 60  
 Met Pro Gln Gly Leu Ser Thr Ser Phe Leu Pro Thr Leu Pro Gly Val  
 65 70 75 80  
 Ala Ser Gly Val Glu Ala Pro Ser Trp Arg Ile Cys Leu Gln Glu Gly  
 85 90 95  
 Glu

<210> 475  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

<400> 475  
 acgcgtgaag ggtccctcc aaactctgag cctccttcca agccttgctg ggagctcccc  
 60  
 agcgctgcc ggagaggcct ctctccagg cgggcttccc gcgccgatgt gaaggagagg  
 120  
 ctgccccaga ggggtctgga tcgtaatcca gaaagggaca gtcccacagc cataatcccc  
 180  
 aatgctggga ctcttcagta aaggaagaga tggctttttc gttcatctgc ctttctgaaa  
 240  
 ggtaaaatat ctccagatcc gggctctctg ggcgactgcg tatgtggggg tccctgaagc  
 300  
 ctttgatgga tcttgtaga agtgggttgt tcatcttggg gtttt  
 345

<210> 476  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 476  
 Met Asn Asn Pro Leu Leu Thr Arg Ser Ile Lys Gly Phe Arg Asp Pro  
 1 5 10 15  
 His Ile Arg Ser Arg Pro Glu Ser Pro Asp Leu Glu Ile Phe Tyr Leu  
 20 25 30  
 Ser Glu Arg Gln Met Asn Glu Lys Ala Ile Ser Ser Phe Thr Glu Glu  
 35 40 45  
 Ser Gln His Ser Gly Leu Trp Leu Trp Asp Cys Pro Phe Leu Asp Tyr  
 50 55 60  
 Asp Pro Asp Pro Ser Gly Ala Ala Ser Pro Ser His Arg Arg Gly Lys

65					70					75					80
Pro	Ala	Trp	Arg	Arg	Gly	Leu	Ser	Gly	Arg	Arg	Trp	Gly	Ala	Pro	Ser
				85					90					95	
Lys	Ala	Trp	Lys	Glu	Ala	Gln	Ser	Leu	Glu	Gly	Thr	Leu	His	Ala	
			100					105					110		

```
<210> 477
<211> 422
<212> DNA
<213> Homo sapiens
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```
<400> 477
acgcgtggcc gagccagcgt gctcaaggaa atgggtcaacg gcactcttat taacggctgg
60
gactctcccg aggtggaacg ggcactggac ctgtgcatgg cgtgcaaagg gtgcgccga
120
gattgccccca ccggaatcga catggccagc taccgcagca cggttcttga cgaaaaatac
180
cgtcaccgtc tccgccctcg ctcccacctg acgatggggc tgctgcccac gtgggaacgt
240
ttgctcaatc ggaccccagg agcgcgcgtc ctggctaacg cagtgccttc gatgccggtc
300
ttcgcacgtc ttgctagatg gacagccggg gtggatcagc gtcgtccctt ccccgattc
360
cagccctcgg ccagattggc cagtccgcag gccgccccgg ttaaggagat tgtggcggat
420
cc
422
```

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<210> 478
<211> 140
<212> PRT
<213> Homo sapiens
```

```

<400> 478
Thr Arg Gly Arg Ala Ser Val Leu Lys Glu Met Val Asn Gly Thr Leu
  1          5      10          15
Ile Asn Gly Trp Asp Ser Pro Glu Val Glu Arg Ala Leu Asp Leu Cys
      20          25          30
Met Ala Cys Lys Gly Cys Ala Arg Asp Cys Pro Thr Gly Ile Asp Met
      35          40          45
Ala Ser Tyr Arg Ser Thr Val Leu Asp Glu Lys Tyr Arg His Arg Leu
      50          55          60
Arg Pro Arg Ser His Leu Thr Met Gly Leu Leu Pro Met Trp Glu Arg
65          70          75          80
Leu Leu Asn Arg Thr Pro Gly Ala Pro Ser Leu Ala Asn Ala Val Leu
      85          90          95
Ser Met Pro Val Phe Ala Arg Leu Ala Arg Trp Thr Ala Gly Val Asp
      100          105          110
Gln Arg Arg Pro Leu Pro Arg Phe Gln Pro Ser Ala Arg Leu Ala Ser
      115          120          125
Pro Gln Ala Ala Pro Val Lys Glu Ile Val Ala Asp
      130          135          140

```

<210> 479  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

<400> 479  
 cgctggcca ttggccgggc gctggtgcgg caccgcgac tggatgattgc cgatgagccg  
 60  
 atctcggcgt tggacatgac catccagaag cagattcttg agctgttcga ggcctgcag  
 120  
 gcgcagtacg gctttgcctg cctgttcac tccacgacc tggcagcggg ggaacgcac  
 180  
 gccaccggg tggcggtgat gagcgagggc aggggtggtg aaatgggtgc ccgcgacgag  
 240  
 atcttcgacc gccgcagca cccctacacc cgcaagctgc tggccgccgc cagccccttg  
 300  
 gagaaacttg aaaacggtgg ctaccgcac cgccagggcc ccgtaccg  
 348

<210> 480  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 480  
 Arg Val Ala Ile Gly Arg Ala Leu Val Arg His Pro Arg Leu Val Ile  
 1 5 10 15  
 Ala Asp Glu Pro Ile Ser Ala Leu Asp Met Thr Ile Gln Lys Gln Ile  
 20 25 30  
 Leu Glu Leu Phe Glu Arg Leu Gln Ala Gln Tyr Gly Phe Ala Cys Leu  
 35 40 45  
 Phe Ile Ser His Asp Leu Ala Ala Val Glu Arg Ile Ala His Arg Val  
 50 55 60  
 Ala Val Met Ser Glu Gly Arg Val Val Glu Met Gly Ala Arg Asp Glu  
 65 70 75 80  
 Ile Phe Asp Arg Pro Gln His Pro Tyr Thr Arg Lys Leu Leu Ala Ala  
 85 90 95  
 Ala Ser Pro Leu Glu Lys Leu Glu Asn Gly Gly Tyr Arg Ile Arg Gln  
 100 105 110  
 Gly Pro Val Pro  
 115

<210> 481  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

<400> 481  
 aagcttctga ctgtggcatt ctccctgctt aatatgtcct caatatcccc tacttactgg  
 60  
 gcaaaatcct gcttatgctt tgggactagc tcaaagacca ctcccttgga tgggtgccttc  
 120  
 cctgccctgc cggcttgccg tggcttcctc agtgtagga ttaccatcac attgcatcat  
 180

gagagcagaa gaccatctcc atgtgactgc tgcccctgct cccagcaggg cccacaanca  
 240  
 cccagtcag gacctggctc acgctgggtg gcggatgccc aggaatgggg ctctggatct  
 300  
 gcctcttctc ctgcaggacc aggaaccgc tgcccctgtc ctgccccagg aaaccctcag  
 360  
 taaatcccca gtcatttgag tttccctca gcgccagaga ccaataacac atctccacca  
 420  
 acctgaaaaa ccttcacgcg t  
 441

<210> 482

<211> 120

<212> PRT

<213> Homo sapiens

<400> 482

Lys	Leu	Leu	Thr	Val	Ala	Phe	Ser	Leu	Leu	Asn	Met	Ser	Ser	Ile	Ser
1				5					10					15	
Pro	Thr	Tyr	Trp	Ala	Lys	Ser	Cys	Leu	Cys	Phe	Gly	Thr	Ser	Ser	Lys
			20					25					30		
Thr	Thr	Pro	Leu	Asp	Gly	Ala	Phe	Pro	Ala	Leu	Pro	Ala	Cys	Ala	Gly
			35				40					45			
Phe	Leu	Ser	Val	Arg	Ile	Thr	Ile	Thr	Leu	His	His	Glu	Ser	Arg	Arg
	50					55				60					
Pro	Ser	Pro	Cys	Asp	Cys	Cys	Pro	Cys	Ser	Gln	Gln	Gly	Pro	Gln	Xaa
65				70						75				80	
Pro	Ser	Pro	Gly	Pro	Gly	Ser	Arg	Trp	Val	Ala	Asp	Ala	Gln	Glu	Trp
			85					90					95		
Gly	Ser	Gly	Ser	Ala	Ser	Ser	Pro	Ala	Gly	Pro	Gly	Asn	Arg	Cys	Pro
			100					105					110		
Val	Pro	Ala	Pro	Gly	Asn	Pro	Gln								
		115					120								

<210> 483

<211> 330

<212> DNA

<213> Homo sapiens

<400> 483

acgcgttcat tccctgatgg ccacgcacga gctaacggag ggatggggcg aaggggaaggc  
 60  
 caagggttgcc tcgaagacca aggagtgtgc agggcaggac ctcgttttaa aggaatatcc  
 120  
 tctcaccaga gacacgcggc ggccaggcag ggccggagcg gggcctgtgc ccaggctccg  
 180  
 agcgtctgcc cagcccagca tccctgtccc cagccaggaa tatgtcttcg tggcatagag  
 240  
 ggagctcttg gagccacacc tgcgtgtgca catgtgtcac cccactgctg ggagggggctc  
 300  
 tcccgggacc ctgcagcgtg ggctggggccc  
 330

<210> 484

<211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 484

Met	Gly	Arg	Arg	Glu	Gly	Gln	Gly	Cys	Leu	Glu	Asp	Gln	Gly	Val	Cys
1				5				10						15	
Arg	Ala	Gly	Pro	Arg	Phe	Lys	Gly	Ile	Ser	Ser	His	Gln	Arg	His	Ala
			20					25					30		
Ala	Ala	Arg	Gln	Gly	Arg	Ser	Gly	Ala	Cys	Ala	Gln	Ala	Pro	Ser	Val
			35					40					45		
Cys	Pro	Ala	Gln	His	Pro	Cys	Pro	Gln	Pro	Gly	Ile	Cys	Leu	Arg	Gly
	50					55					60				
Ile	Glu	Gly	Ala	Leu	Gly	Ala	Thr	Pro	Ala	Cys	Ala	His	Val	Ser	Pro
65					70					75					80
His	Cys	Trp	Glu	Gly	Leu	Ser	Arg	Asp	Pro	Ala	Ala	Trp	Ala	Gly	Pro
				85					90					95	

<210> 485  
 <211> 377  
 <212> DNA  
 <213> Homo sapiens

<400> 485

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acgcgtgctc ggcgggacga agtcggcgct gatcgcccag tcatgcgccc tgcccggtgcc
60
gcccgattcg gcgatcgccg cattcggccg gccggaatcg agaaggaatg cgtggacgta
120
cgggggatac caaaggaatc ttgtcgaggg cttcgcgccc ctcgacgtgg atcacctgta
180
cccgacggac gtggggaagc cgtcccgcga gctcacggga ctccgcgaca tcgatgtgcg
240
atacgatttg caccgtcgtc ggctgcgtgc gcgacacatg ctccgcgata gcctcagcgg
300
tggtttccga cgtcagcagg aacgtggcga cgggtggcat ggcggtcgcc gttatgtcgg
360
cattcccatt cctcggg
377

```

<210> 486  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 486

Met	Arg	Pro	Ala	Arg	Ala	Ala	Gln	Phe	Gly	Asp	Arg	Arg	Ile	Arg	Pro
1				5					10					15	
Ala	Gly	Ile	Glu	Lys	Glu	Cys	Val	Asp	Val	Arg	Gly	Ile	Pro	Lys	Glu
			20					25					30		
Ser	Cys	Arg	Gly	Leu	Arg	Gly	Pro	Arg	Arg	Gly	Ser	Pro	Val	Pro	Asp
			35					40					45		
Gly	Arg	Gly	Glu	Ala	Val	Pro	Gln	Ala	His	Gly	Thr	Pro	Arg	His	Arg
	50					55					60				
Cys	Ala	Ile	Arg	Phe	Ala	Pro	Ser	Ser	Ala	Ala	Cys	Ala	Thr	His	Ala

65		70		75		80									
Pro	Arg	Ser	Pro	Gln	Arg	Trp	Phe	Pro	Thr	Ser	Ala	Gly	Thr	Trp	Arg
			85					90					95		
Arg	Val	Ala	Trp	Arg	Ser	Pro	Leu	Cys	Arg	His	Ser	His	Ser	Ser	
			100					105					110		

<210> 487  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

<400> 487  
 nnacgcgtaa gatcgattgt ggatcagcac cgatgctggg cccccgacg ttgttgttgg  
 60  
 cgggtgttgt tgtaaggagt gtgtgtgatg cgtgttgggtg ttcctactga ggtaagaat  
 120  
 agtgagtttc gtgtggctgt gacgccggcg ggtgttcattg cgttggttgg tcgtgggtcat  
 180  
 gaggtgttgg ttcaggctgg tgctggtgtg ggttcgggta ttccggattc ggattttgtg  
 240  
 ggtgctggtg cgcggttgt ggggtgatgtg gagtcggtgt ggggtgatgc tgatttgggtg  
 300  
 ttgaagggtga aggagcctgt tgcggaggag tatgggcggt tgcattgaggg tttggttctt  
 360  
 tttacgtatc ttcatttggc tgctgatgag gcgttgactc gtgagctttt ggggcgtggg  
 420  
 gtgacgtcga ttgcgtatga gacggtggag ttggccgat  
 459

<210> 488  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 488  
 Met Arg Val Gly Val Pro Thr Glu Val Lys Asn Ser Glu Phe Arg Val  
 1 5 10 15  
 Ala Val Thr Pro Ala Gly Val His Ala Leu Val Gly Arg Gly His Glu  
 20 25 30  
 Val Leu Val Gln Ala Gly Ala Gly Val Gly Ser Gly Ile Pro Asp Ser  
 35 40 45  
 Asp Phe Val Gly Ala Gly Ala Arg Val Val Gly Asp Val Glu Ser Val  
 50 55 60  
 Trp Gly Asp Ala Asp Leu Val Leu Lys Val Lys Glu Pro Val Ala Glu  
 65 70 75 80  
 Glu Tyr Gly Arg Leu His Glu Gly Leu Val Leu Phe Thr Tyr Leu His  
 85 90 95  
 Leu Ala Ala Asp Glu Ala Leu Thr Arg Glu Leu Leu Gly Arg Gly Val  
 100 105 110  
 Thr Ser Ile Ala Tyr Glu Thr Val Glu Leu Ala Asp  
 115 120

<210> 489  
 <211> 542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 489

nacgcgtttg gcgtactgag tgcggtggtg gatggcgacg acagtggcaa gccgctgctc  
 60  
 aaccagcacg gttgctacaa agtgcgcttt ccatttacct gcgatcaaaa gcccagcact  
 120  
 cgggggttcgg catggctgcg caggggtgctg ttgtctgccg gttccagcca tggcatgcac  
 180  
 tttccgctgc tcaaaggcag tgaagtgttg gtgtcatttc tggggggcga ccccgaccgg  
 240  
 ccgattatcg ttggctgcgt accaaactcg gaaaccccg gcatggctcg tgagcgtaac  
 300  
 gccaccacaga gcggcttctc cacggccgga gggcacttcc tggcgatgga agaccacccc  
 360  
 ggggctgccc atctgaagct ggggtgcgct ggcggcaaca gcgtcttcac actgggcaat  
 420  
 ggcaaagtcg ccggcgcgca actgcgcacc aacgccccac atgcaattga catcgtcttc  
 480  
 gctcaaacac gaagtgcgag gcgtgtactc attgtcgatg ggcaccgggg acccggcggc  
 540  
 cg  
 542

&lt;210&gt; 490

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 490

Xaa	Ala	Phe	Gly	Val	Leu	Ser	Ala	Val	Val	Asp	Gly	Asp	Asp	Ser	Gly
1				5					10					15	
Lys	Pro	Leu	Leu	Asn	Gln	His	Gly	Cys	Tyr	Lys	Val	Arg	Phe	Pro	Phe
			20					25					30		
Thr	Arg	Asp	Gln	Lys	Pro	Ser	Thr	Arg	Gly	Ser	Ala	Trp	Leu	Arg	Arg
			35				40					45			
Val	Ser	Leu	Ser	Ala	Gly	Ser	Ser	His	Gly	Met	His	Phe	Pro	Leu	Leu
	50					55					60				
Lys	Gly	Ser	Glu	Val	Leu	Val	Ser	Phe	Leu	Gly	Gly	Asp	Pro	Asp	Arg
65				70						75				80	
Pro	Ile	Ile	Val	Gly	Cys	Val	Pro	Asn	Ser	Glu	Thr	Pro	Ser	Met	Val
			85					90						95	
Val	Glu	Arg	Asn	Ala	Thr	Gln	Ser	Gly	Phe	Ser	Thr	Ala	Gly	Gly	His
			100					105					110		
Phe	Leu	Ala	Met	Glu	Asp	His	Pro	Gly	Ala	Ala	His	Leu	Lys	Leu	Gly
	115					120					125				
Ala	Pro	Gly	Gly	Asn	Ser	Val	Phe	Thr	Leu	Gly	Asn	Gly	Lys	Val	Ala
	130					135					140				
Gly	Ala	Gln	Leu	Arg	Thr	Asn	Ala	Pro	His	Ala	Ile	Asp	Ile	Val	Phe
145				150						155				160	
Ala	Gln	Thr	Arg	Ser	Ala	Arg	Arg	Val	Leu	Ile	Val	Asp	Gly	His	Arg
			165					170						175	
Gly	Pro	Gly	Gly												



180

&lt;210&gt; 491

&lt;211&gt; 825

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 491

```

nacgcgtcga ggcgacggtc ggcgccgtca tggcgactgt tctcgagggc acatgggaac
60
gcatcggtgc cggattccgg actgccttaa ccacagcctt ggaacgcacc gatgaatggg
120
tgggcgggccc tgacagcaag cccctcaacg aagtcgagac actgcgccgg tgcgccgatg
180
aactcatcgg cgggcccgtc ggcgcggttg ccgcgatgca cggaggggtca atcgaattgg
240
tcgacgtgtc ggtcggtgac gaagagcgca gagtcgacgt caccatgaag ggagcatgcc
300
gaggttgccc ggcagccatc agaccctaca tcagcgcctg gaacatcaac tgagtctgcg
360
nattgcgcga gccggtcacc gtgcgggaaa tctgacacct actccgacag ctccacctcg
420
acgagcacct ccacgacgag gccaagccac tcgtagacgc attcctcctc ggcatccaat
480
tcttcccggg ccgcccgagc gacttcgtcg gcagtaacct ggtcgatgat ccctagcctg
540
gcggccatca tgccacgcag cgcattgaca gtacgaagcc aacgttgcg catcacaggg
600
ttcatggaga tacagccggt tcggtgcaac gtctccacat cagcacttaa ggactgagcg
660
tcttcccagc gcgccgcgac atcctcggcg tcatggtcga catggaattg cgcgtcagct
720
gagtcgtcgt cacgataggc gctgggcagg atcaatcgac gcacctcgtc gtcctcctgg
780
agtccagaaa actggctctc ccaaaaagcg aacgggtccc cctcc
825

```

&lt;210&gt; 492

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 492

```

Met Asn Gly Trp Ala Ala Leu Thr Ala Ser Pro Ser Thr Lys Ser Arg
1           5           10          15
His Cys Ala Gly Ala Pro Met Asn Ser Ser Ala Gly Pro Ser Ala Arg
20          25          30
Leu Pro Arg Cys Thr Glu Gly Gln Ser Asn Trp Ser Thr Cys Arg Ser
35          40          45
Val Thr Lys Ser Ala Glu Ser Thr Ser Pro
50          55

```

&lt;210&gt; 493

&lt;211&gt; 863

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 493

nacgcgttcc aacctcgtca aaacggctat cgcaggaaat gaccccaact ggggtcgcac  
 60  
 cctcgcggcg atcggatgtg ttcctgagaa tatagctccc ttcgatcccg accaggtgga  
 120  
 tgtgtccatc aatgacattc agatctgtaa ggccgggggt atcggggagg accgcaacct  
 180  
 cgtcgatatg aggccacgag aggttcacat cgatattgag ctgcatgcgg gtgatgccga  
 240  
 agctgcggta tggactaatg atctgacca ccaatacgtc gaagagaata gcgcgtatac  
 300  
 atcatgaccc ttgtctttga catccccctc aacgactccc agttctcggc tcagcggaaa  
 360  
 tctgagggtc tggtagaagc gctgccttgg atcaggcggt ttcagggccg cactgtcgtc  
 420  
 gtgaaatatg gcggcaacgc gatggttgat cccggtctgc agcaggcctt cgccgacgac  
 480  
 attgtgttta tggcctctgt ggggattcgc cctattgtcg tccacggtgg tggccctcag  
 540  
 atcaatgcca tgcttgctga atccgctacc ccggtggagt tccgtaatgg tttgcgggtg  
 600  
 acatctccgg aggtcatgga ggttgctcgg atggtgctcg tcgggcagggt gggccgtcag  
 660  
 ctcgtaaac gaatcaacgc ctatgcgccg ctagcagctg gcatgtcagg cgaggacttt  
 720  
 ggcttttttt cggcccgga gtcgcgggta attgttgatg gcgagcaaat agacatgggt  
 780  
 ttagtgggag acatcgttga cgtcaacatc gatctcgta tctctatgct tgatcgcggt  
 840  
 cagattccgg tcattgcacc ggt  
 863

&lt;210&gt; 494

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 494

Met	Thr	Leu	Ala	Leu	Asp	Ile	Pro	Leu	Asn	Asp	Ser	Gln	Phe	Ser	Ala
1				5					10					15	
Gln	Arg	Lys	Ser	Glu	Val	Leu	Val	Glu	Ala	Leu	Pro	Trp	Ile	Arg	Arg
			20					25					30		
Phe	Gln	Gly	Arg	Thr	Val	Val	Val	Lys	Tyr	Gly	Gly	Asn	Ala	Met	Val
		35					40					45			
Asp	Pro	Gly	Leu	Gln	Gln	Ala	Phe	Ala	Asp	Asp	Ile	Val	Phe	Met	Ala
	50					55					60				
Ser	Val	Gly	Ile	Arg	Pro	Ile	Val	Val	His	Gly	Gly	Gly	Pro	Gln	Ile
65					70					75				80	
Asn	Ala	Met	Leu	Ala	Glu	Ser	Ala	Thr	Pro	Val	Glu	Phe	Arg	Asn	Gly
				85					90					95	
Leu	Arg	Val	Thr	Ser	Pro	Glu	Val	Met	Glu	Val	Val	Arg	Met	Val	Leu

	100		105		110										
Val	Gly	Gln	Val	Gly	Arg	Gln	Leu	Val	Asn	Arg	Ile	Asn	Ala	Tyr	Ala
	115						120					125			
Pro	Leu	Ala	Ala	Gly	Met	Ser	Gly	Glu	Asp	Phe	Gly	Leu	Phe	Ser	Ala
	130						135					140			
Arg	Lys	Ser	Arg	Val	Ile	Val	Asp	Gly	Glu	Gln	Ile	Asp	Met	Gly	Leu
145					150					155				160	
Val	Gly	Asp	Ile	Val	Asp	Val	Asn	Ile	Asp	Leu	Val	Ile	Ser	Met	Leu
			165						170					175	
Asp	Arg	Gly	Gln	Ile	Pro	Val	Ile	Ala	Pro						
	180							185							

&lt;210&gt; 495

&lt;211&gt; 514

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 495

```

gcgcgcgaca ccggtgcccc gattagcgtg ccagtgggtg acgtcactaa gggtcacgtc
60
tggaatgtga caggtgacgt tcttaacgcc ngatccctcc acaatcgagg tgacnntgag
120
cgttggccga tccaccggga tccccgggcc ttcgatgacc ttgagcccga gaccgagatg
180
ctggagaccg gtattaaggt ccttgacttg ctgactcctt acgtcaaggg cggcaagatt
240
ggcctctttg gcggcgctgg tgtgggtaag acggtgctca ttcaggagat gatttaccgt
300
atcgcccaca acttcggcgg tacttcgggt ttcgccggtg tcggtgagcg taccgcgag
360
ggtaacgacc tcatcaacga gatggacgag gccggtgtgc tcaaagacac cgccctggta
420
ttcggccaga tggacgagcc cccgggcacg cggtacgagc tgtcgcgctg gcagccctgc
480
ggcccatgcc tggccaactg ctgtgggacc ttgg
514

```

&lt;210&gt; 496

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 496

Ala	Arg	Asp	Thr	Gly	Ala	Pro	Ile	Ser	Val	Pro	Val	Gly	Asp	Val	Thr
1				5					10				15		
Lys	Gly	His	Val	Trp	Asn	Val	Thr	Gly	Asp	Val	Leu	Asn	Ala	Xaa	Ser
			20					25				30			
Leu	His	Asn	Arg	Gly	Asp	Xaa	Glu	Arg	Trp	Pro	Ile	His	Arg	Asp	Pro
		35				40					45				
Pro	Ala	Phe	Asp	Asp	Leu	Glu	Pro	Glu	Thr	Glu	Met	Leu	Glu	Thr	Gly
	50					55				60					
Ile	Lys	Val	Leu	Asp	Leu	Leu	Thr	Pro	Tyr	Val	Lys	Gly	Gly	Lys	Ile
65					70				75					80	
Gly	Leu	Phe	Gly	Gly	Ala	Gly	Val	Gly	Lys	Thr	Val	Leu	Ile	Gln	Glu



```

          35          40          45
Cys Leu His Ala Ser Cys His Thr Pro Ala Val Ile Pro Ala Arg Ala
  50          55          60
Pro Ser Ala Glu Ala Glu Leu Cys Ser Ala Gln Ala Trp Asp Leu Pro
  65          70          75          80
Arg Gln Ala Pro Val Gly Gly Ala Ala Pro Gly Lys Glu Ala Thr Ala
          85          90          95
Ser Leu Asn Ile Leu Arg Cys Lys Val Val Ala Pro Arg Gly Val Ser
          100          105          110
Val Lys Thr Gly Thr Arg Met Ala Gly Pro Ala Arg Leu Phe Pro His
          115          120          125
Leu Ser Ala Ser Glu Ala Ser Leu Glu Asp Ser Gly Pro Arg Met Ser
          130          135          140
Pro Arg Thr Ser Gln Ser Ala Ser Ser Ser Tyr Phe Cys Cys Ser Leu
  145          150          155          160
Gly Pro Asp Leu Ala Lys Val Ser Gln Arg Gly Gly Pro Arg Ser Glu
          165          170          175
Leu Ser Ser Cys Arg Gly Pro Arg Asp Gly Leu Gly Cys Lys Leu
          180          185          190

```

&lt;210&gt; 499

&lt;211&gt; 444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 499

```

acgcgtgaag ggtgggcagt gttgagctga gtgagccctc ctccctgcaa tgctggagcc
  60
ctgccttctg cctgaccctc tggttctcta agcagtctat acgtgagaag ccctttcttc
  120
aagtgaagc ttctgagctc actacgagag cactggagct ggaacctctc tgggttcaaa
  180
tcctcaactg gggggttgga ggaggttact tcacttctca aaacctcaat ttccttatct
  240
gcaaaatggg gtaataggag cccctcttca tcaatgcttg gaggaatgc ctggcacagt
  300
agggcagtta ccgtcatgga gaacagaaag gccccgagct atcctggatg tggtgagaat
  360
gggtcctgga tcctgcctgc tcggcctttt cattctcttc ttcacctaca ggctcccaca
  420
aagggcctct gaaaacacag ggtg
  444

```

&lt;210&gt; 500

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 500

```

Met Thr Val Thr Ala Leu Leu Cys Gln Ala Phe Pro Pro Ser Ile Asp
  1          5          10          15
Glu Glu Gly Leu Leu Leu Pro His Phe Ala Asp Lys Glu Ile Glu Val
          20          25          30
Leu Arg Ser Glu Val Thr Ser Ser Asn Pro Pro Val Glu Asp Leu Asn

```

35	40	45
Pro Glu Arg Phe Gln Leu Gln Cys Ser Arg Ser Glu Leu Arg Ser Phe		
50	55	60
His Leu Lys Lys Gly Leu Leu Thr Tyr Arg Leu Leu Arg Lys Pro Glu		
65	70	75
Gly Gln Ala Glu Gly Arg Ala Pro Ala Leu Gln Gly Gly Gly Leu Thr		
85	90	95
Gln Leu Asn Thr Ala His Pro Ser Arg		
100	105	

<210> 501  
 <211> 800  
 <212> DNA  
 <213> Homo sapiens

<400> 501  
 agatctgac cgagaagtgg ctgctcaggg aaatgactac tccatggctt tcttaactca  
 60  
 ggtactcctt attcaatgag aggcctgagg tgagaccgc catgcggcgc gtggatcgca  
 120  
 tgggtgtagt gcacactagc aaggggctta ggtctccagc tgaggtcaga tgcacacttg  
 180  
 gaccttgtagc tggggagtaa cacacatctc tgtgttcagc gaaccatcca ggagctgttt  
 240  
 gaagtttatt ctcccatgga tgatgctggc tccccggta aagctgagga gtttgtggtg  
 300  
 ctttctcagg aaccttctgt cacggaaacc attgcaccca aaattgcaag acctttcata  
 360  
 gaggccctca agagtattga gtatctggag gaggatgcc agaagtccgc acaggagggg  
 420  
 gtgctgggac cacacactga tgctctgtca tcagactctg agaacatgcc gtgtgatgaa  
 480  
 gaaccatccc aattagagga gctagctgac ttcattggagc agcttacacc aattgaaaaa  
 540  
 tatgctttaa attacctgga atcttgaggc agggcctgag agagcacgct gcgccgtact  
 600  
 tccagcagct gcggcagacc acggctccac gcctgctgca gttccctgag ctgaggctgg  
 660  
 tgcagttcga ctgaggtatg cggcagttgg gggcgtggcc cgtgcgggag ctgcactggc  
 720  
 cctggatgat gaggcgctct tgatgtgatt cgtttcccag ggaagttgga agcttttagct  
 780  
 atcttgcttc agaaactgaa  
 800

<210> 502  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 502  
 Met Asp Asp Ala Gly Phe Pro Val Lys Ala Glu Glu Phe Val Val Leu  
 1 5 10 15  
 Ser Gln Glu Pro Ser Val Thr Glu Thr Ile Ala Pro Lys Ile Ala Arg

```

          20          25          30
Pro Phe Ile Glu Ala Leu Lys Ser Ile Glu Tyr Leu Glu Glu Asp Ala
      35          40          45
Gln Lys Ser Ala Gln Glu Gly Val Leu Gly Pro His Thr Asp Ala Leu
      50          55          60
Ser Ser Asp Ser Glu Asn Met Pro Cys Asp Glu Glu Pro Ser Gln Leu
65          70          75          80
Glu Glu Leu Ala Asp Phe Met Glu Gln Leu Thr Pro Ile Glu Lys Tyr
      85          90          95
Ala Leu Asn Tyr Leu Glu Ser
          100

```

<210> 503  
 <211> 538  
 <212> DNA  
 <213> Homo sapiens

```

<400> 503
nnacgcggttg tcgtctctcc gatcattgat tttgttgat tctgcaatga tgtaaaggaa
60
gatgatgaca cggagaagtt taaagaagcc attgtgaaat ttcataaggct gtttgggatg
120
ccagaggaag agaaactcgt caactattac tcttcagct attggaaggg gaaggcccc
180
cgtcagggtt ggatgtacct cagcattaac caccttgct tttattcttt tcttatggga
240
agggaaagcga aactgggtcat ccggtgggta gacatcactc agcttgagaa gaatgcccc
300
ctgcttctgc ctgatgtgat caaagtgagc acacggtcca gtgagcattt cttctctgta
360
ttcctcaaca tcaacgagac cttcaagtta atggagcagc ttgccaaact agccatgagg
420
caactcttag acaatgaggg atttgaacaa gatcgatccc tgcccaaact caaaaggaaa
480
tctcctaaaa aagtgtctgc tctaaaacgt gatcttgatg cctgggccct tcacgcgt
538

```

<210> 504  
 <211> 179  
 <212> PRT  
 <213> Homo sapiens

```

<400> 504
Xaa Arg Val Val Val Ser Pro Ile Ile Asp Phe Val Val Phe Cys Asn
1      5      10      15
Asp Val Lys Glu Asp Asp Asp Thr Glu Lys Phe Lys Glu Ala Ile Val
      20      25      30
Lys Phe His Arg Leu Phe Gly Met Pro Glu Glu Glu Lys Leu Val Asn
      35      40      45
Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Lys Val Pro Arg Gln Gly Trp
      50      55      60
Met Tyr Leu Ser Ile Asn His Leu Cys Phe Tyr Ser Phe Leu Met Gly
65      70      75      80
Arg Glu Ala Lys Leu Val Ile Arg Trp Val Asp Ile Thr Gln Leu Glu

```

[illegible]

```
<210> 505
<211> 381
<212> DNA
<213> Homo sapiens
```

```
<400> 505
gtgcacgaca ccgaacggta cgaacgtatc tcccaggcac gtcgcgagga acagcaggcc
60
atgctcgggt acgaacngctc aagaacctgt cgcatacact tgctcaccgg gcagctggac
120
gacccctcca cgactccttg cggacgctgc gacgtctgtg ctggcccgtg gtactcagtc
180
gaggtcgata agtcagccgc tgtgagagcc gtccaatccc tcaaccgggt gggagttccg
240
gtggaaccac gcgccgcctg gcccgaggg atggacgcc tccaggttgc gctcaagggt
300
cgcatacagt ccgaggagat cgctgcagag ggccgcgtca tcgccagact ctccgatctg
360
gggtggggag gggcgctgcg c
381
```

```
<210> 506
<211> 127
<212> PRT
<213> Homo sapiens
```

400> 506																
Val	His	Asp	Thr	Glu	Arg	Tyr	Glu	Arg	Ile	Ser	Gln	Ala	Arg	Arg	Glu	
1				5					10					15		
Glu	Gln	Gln	Ala	Met	Leu	Gly	Tyr	Asp	Xaa	Ser	Arg	Thr	Cys	Arg	Met	
			20					25					30			
Thr	Leu	Leu	Thr	Gly	Gln	Leu	Asp	Asp	Pro	Ser	Thr	Thr	Pro	Cys	Gly	
		35					40					45				
Arg	Cys	Asp	Val	Cys	Ala	Gly	Pro	Trp	Tyr	Ser	Val	Glu	Val	Asp	Gln	
	50				55						60					
Ser	Ala	Ala	Val	Arg	Ala	Val	Gln	Ser	Leu	Asn	Arg	Val	Gly	Val	Pro	
65				70						75					80	
Val	Glu	Pro	Arg	Ala	Ala	Trp	Pro	Ala	Gly	Met	Asp	Ala	Leu	Gln	Val	
				85					90					95		
Ala	Leu	Lys	Gly	Arg	Ile	Ser	Ala	Glu	Glu	Ile	Ala	Ala	Glu	Gly	Arg	



	100		105		110									
Val	Ile	Ala	Arg	Leu	Ser	Asp	Leu	Gly	Trp	Gly	Gly	Ala	Leu	Arg
	115			120								125		

<210> 507  
 <211> 499  
 <212> DNA  
 <213> Homo sapiens

<400> 507  
 gccggcgtgt tcaacctcat ggtgtggggcc ttcattaccg acgtcatcga tgcccaggag  
 60  
 gtcagtgtccg gggagcgtga agacggtgtc atctatggcg tgaactcctt cgcccgcaaa  
 120  
 cttgcccagg ccattgccgg tggaatcggc ggagccatgc tgacgatgat cggctaccag  
 180  
 tcctcctccc aaggtggtgc cgttcagtcg gagtcgctcg tcaatcacct gtacacgctc  
 240  
 gccaccgcca tcccgcacgat ctgctgcctc ggcgctgccc tgctcatget gggctaccg  
 300  
 ctcacccgcg acaaggtggt cgccaacgcc gacgagttgg ctgctcgcca cgcagtacag  
 360  
 gccgagcaaa actcctgacc cataacggag gcacatcatg gacacgctca tgcggatcac  
 420  
 cgaccacttg acaacctcgc cgggtatcca attgaaaatt gacaagcgat ggggtgcctc  
 480  
 cgtcacattt gtgacgcgt  
 499

<210> 508  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 508  
 Ala Gly Val Phe Asn Leu Met Val Trp Ala Phe Ile Thr Asp Val Ile  
 1 5 10 15  
 Asp Ala Gln Glu Val Met Ser Gly Glu Arg Glu Asp Gly Val Ile Tyr  
 20 25 30  
 Gly Val Asn Ser Phe Ala Arg Lys Leu Ala Gln Ala Ile Ala Gly Gly  
 35 40 45  
 Ile Gly Gly Ala Met Leu Thr Met Ile Gly Tyr Gln Ser Ser Ser Gln  
 50 55 60  
 Gly Gly Ala Val Gln Ser Glu Ser Val Val Asn His Leu Tyr Thr Leu  
 65 70 75 80  
 Ala Thr Ala Ile Pro Thr Ile Cys Cys Leu Gly Ala Ala Leu Leu Met  
 85 90 95  
 Leu Gly Tyr Pro Leu Thr Arg Asp Lys Val Val Ala Asn Ala Asp Glu  
 100 105 110  
 Leu Ala Arg Arg His Ala Val Gln Ala Glu Gln Asn Ser  
 115 120 125

<210> 509  
 <211> 360

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 509

ttggccatgg atttggctcg caagttcagt cccaaagatg tcacgctcta tctaattggac  
 60  
 ttcgggacca atggtgtggc accactaggc caattaccac aggtggccga caccttgctt  
 120  
 ttggatcata cggagaagat tgccaagttt gtacgcatca tggagcggga gctcaaccgg  
 180  
 cgtaagaagc tcttgtccga ctacgggtgtt ggtacactag agctctaccg tcaggctagc  
 240  
 ggtcagcaag agccggccat cgtcacctcg ctggacagtt atgagtccat gaaggaagag  
 300  
 gcctatgaag cggagctctt cacgctcttg gtgcggatct cccgggaagg tctcagcatc  
 360

&lt;210&gt; 510

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 510

Leu	Ala	Met	Asp	Leu	Ala	Arg	Lys	Phe	Ser	Pro	Lys	Asp	Val	Thr	Leu
1				5					10					15	
Tyr	Leu	Met	Asp	Phe	Gly	Thr	Asn	Gly	Val	Ala	Pro	Leu	Gly	Gln	Leu
			20					25					30		
Pro	Gln	Val	Ala	Asp	Thr	Leu	Leu	Leu	Asp	His	Thr	Glu	Lys	Ile	Ala
			35				40					45			
Lys	Phe	Val	Arg	Ile	Met	Glu	Arg	Glu	Leu	Asn	Arg	Arg	Lys	Lys	Leu
	50					55				60					
Leu	Ser	Asp	Tyr	Gly	Val	Gly	Thr	Leu	Glu	Leu	Tyr	Arg	Gln	Ala	Ser
65					70				75					80	
Gly	Gln	Gln	Glu	Pro	Ala	Ile	Val	Ile	Leu	Leu	Asp	Ser	Tyr	Glu	Ser
				85				90						95	
Met	Lys	Glu	Glu	Ala	Tyr	Glu	Ala	Glu	Leu	Phe	Thr	Leu	Leu	Val	Arg
				100				105						110	
Ile	Ser	Arg	Glu	Gly	Leu	Ser	Ile								
			115				120								

&lt;210&gt; 511

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 511

ntcgcgaacc gcggtatgc ggtgctccag cccaatttcc gcggatcggg cggttatggc  
 60  
 actgcgttcg gcgatgccgg catcgccag atcgggcgca agatgcagga cgatctcgac  
 120  
 gacgggatgg actggctggt caaggagggc atcgtcgaca agggccgggt gtgcatcgtc  
 180  
 ggggcctcct atggcggcta tgccgcgatg tggggcgcga tccgcaatcc cgaacgctat  
 240

cgctgcgcgg cgagcctggc ggggggttgcc gattaaggcc atgctcaaat ataaccggcg  
 300  
 ctatctcgac aaggaggcgg gcaagcgctg gccgccccgn tcaaccggcg aaccggaatt  
 360  
 c  
 361

<210> 512  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 512  
 Xaa Ala Asn Arg Gly Tyr Ala Val Leu Gln Pro Asn Phe Arg Gly Ser  
 1 5 10 15  
 Gly Gly Tyr Gly Thr Ala Phe Gly Asp Ala Gly Ile Gly Gln Ile Gly  
 20 25 30  
 Arg Lys Met Gln Asp Asp Leu Asp Asp Gly Met Asp Trp Leu Val Lys  
 35 40 45  
 Glu Gly Ile Val Asp Lys Gly Arg Val Cys Ile Val Gly Ala Ser Tyr  
 50 55 60  
 Gly Gly Tyr Ala Ala Met Trp Gly Ala Ile Arg Asn Pro Glu Arg Tyr  
 65 70 75 80  
 Arg Cys Ala Ala Ser Leu Ala Gly Val Ala Asp  
 85 90

<210> 513  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 513  
 nnatgcagac tagaagatgg catgacggtt ttggctggcg gtttcgggct atgcggcatt  
 60  
 ccagaaaatc tgattcaaga gatcaaacga cgccagactt gtgatttgac catagtgtca  
 120  
 aataactgtg gtgtagatgg ttttggttta ggggttttgc tagaagataa gcaagtacgc  
 180  
 aaaatggtgt cttcttatgt ggggtgaaaat gcactgtttg agaagcaatt attacaagg  
 240  
 gagttggaag tcgagctcac tcctcaaggc actcttgccg aaaaactacg cgctggcggc  
 300  
 gcgggaattc ctgccttttt cacagcaacg ggtgtaggta cacctattgg tgagggtaaa  
 360  
 gacacgcgt  
 369

<210> 514  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 514  
 Xaa Cys Arg Leu Glu Asp Gly Met Thr Val Leu Ala Gly Gly Phe Gly

```

      1             5             10             15
Leu Cys Gly Ile Pro Glu Asn Leu Ile Gln Glu Ile Lys Arg Arg Gln
      20             25             30
Thr Cys Asp Leu Thr Ile Val Ser Asn Asn Cys Gly Val Asp Gly Phe
      35             40             45
Gly Leu Gly Val Leu Leu Glu Asp Lys Gln Val Arg Lys Met Val Ser
      50             55             60
Ser Tyr Val Gly Glu Asn Ala Leu Phe Glu Lys Gln Leu Leu Gln Gly
65             70             75             80
Glu Leu Glu Val Glu Leu Thr Pro Gln Gly Thr Leu Ala Glu Lys Leu
      85             90             95
Arg Ala Gly Gly Ala Gly Ile Pro Ala Phe Phe Thr Ala Thr Gly Val
      100            105            110
Gly Thr Pro Ile Gly Glu Gly Lys Asp Thr Arg
      115            120

```

&lt;210&gt; 515

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 515

```

gcgtgggacg agaaggccgc cggcaactgc gcgatcgact acggggtcca ccagatcctc
60
tccgacgtgc aggactcgtc gctgaccgcg atggacgagc tgatcaccca gggcgtgaca
120
tccttcaagc tcttcgtggc ctacaagggc gtcttcctct cggacgacgg gcagatcctg
180
cgggcgttcc agaagggcgc cgacaacggc gcgatgatga tgatgcacgc cgagaacggc
240
gcgatcatcg acgtgctcgt gcagcaggcg ctcgaggccg ggaagaccac cccgtactac
300
cacggcatca gccggccgtg gcaggccgag gaggaggcca cccaccgcgc gatcatgac
360
gccgacctga ccggtgcgcc gttgtac
387

```

&lt;210&gt; 516

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 516

```

Ala Trp Asp Glu Lys Ala Ala Gly Asn Cys Ala Ile Asp Tyr Gly Phe
      1             5             10             15
His Gln Ile Leu Ser Asp Val Gln Asp Ser Ser Leu Thr Ala Met Asp
      20             25             30
Glu Leu Ile Thr Glu Gly Val Thr Ser Phe Lys Leu Phe Val Ala Tyr
      35             40             45
Lys Gly Val Phe Leu Ser Asp Asp Gly Gln Ile Leu Arg Ala Phe Gln
      50             55             60
Lys Gly Ala Asp Asn Gly Ala Met Met Met Met His Ala Glu Asn Gly
65             70             75             80
Ala Ile Ile Asp Val Leu Val Gln Gln Ala Leu Glu Ala Gly Lys Thr

```

```

      85              90              95
Thr Pro Tyr Tyr His Gly Ile Ser Arg Pro Trp Gln Ala Glu Glu Glu
      100              105              110
Ala Thr His Arg Ala Ile Met Ile Ala Asp Leu Thr Gly Ala Pro Leu
      115              120              125
Tyr

```

<210> 517  
 <211> 377  
 <212> DNA  
 <213> Homo sapiens

```

<400> 517
acgcgtgaag ggctggtggg caggccttgc gccccctctg gggacagctc tcctccaccc
60
agacccttc gggccaacag tggggagggg ctgccgtctg agccactgtt ccgacagggg
120
attcgcgagt tccgggggag ctggggactg agctgcgggc ctcttgggct ggggctcttc
180
tccgaggttg gaggcagctt tagaaacttg agaccctag ctggagaggg cagaaggggt
240
ccctgagctt ccccaggaga aggggggcca atttgagct tgcttttcac ctgagatgag
300
gaatgggggt ggccaggccg agagcccagt ggggcatccc cagcacccat gaacatgcta
360
aggaagggga ggggccc
377

```

<210> 518  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

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<400> 518
Met Phe Met Gly Ala Gly Asp Ala Pro Leu Gly Ser Arg Pro Gly His
  1              5              10              15
Pro His Ser Ser Ser Gln Val Lys Ser Lys Leu Gln Ile Gly Pro Pro
      20              25              30
Ser Pro Gly Glu Ala Gln Gly Pro Leu Leu Pro Ser Pro Ala Arg Gly
      35              40              45
Leu Lys Phe Leu Lys Leu Pro Pro Thr Ser Glu Lys Ser Pro Ser Pro
      50              55              60
Gly Gly Pro Gln Leu Ser Pro Gln Leu Pro Arg Asn Ser Arg Ile Pro
65              70              75              80
Cys Arg Asn Ser Gly Ser Asp Gly Ser Pro Ser Pro Leu Leu Ala Arg
      85              90              95
Arg Gly Leu Gly Gly Gly Glu Leu Ser Pro Glu Gly Ala Gln Gly Leu
      100              105              110
Pro Thr Ser Pro Ser Arg
      115

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<210> 519  
 <211> 311

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 519

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 60  
 agaattttaa ttattataaa ggaacctttt ctgcaactct gaaaaatggt agaatatcca  
 120  
 aagaaattga taattttcta ggaaaacatg acttaccaaa attaactcta gaaaagaatc  
 180  
 gatacacatc agtaacaaca gaagttgaga aagtagttaa catattgcca aacctggaat  
 240  
 tcatgattga attctttgag atctactgtg agtacatact ctgcctctgt tcagctgttc  
 300  
 cagaacttaa g  
 311

&lt;210&gt; 520

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 520

Met	Arg	Gly	Lys	Tyr	Gln	Ile	Leu	Lys	Asn	Leu	Asn	Tyr	Tyr	Lys	Gly
1				5					10					15	
Thr	Phe	Ser	Ala	Thr	Leu	Lys	Asn	Val	Arg	Ile	Ser	Lys	Glu	Ile	Asp
			20					25					30		
Asn	Phe	Leu	Gly	Lys	His	Asp	Leu	Pro	Lys	Leu	Thr	Leu	Glu	Lys	Asn
		35					40					45			
Arg	Tyr	Thr	Ser	Val	Thr	Thr	Glu	Val	Glu	Lys	Val	Val	Asn	Ile	Leu
	50					55					60				
Pro	Asn	Leu	Glu	Phe	Met	Ile	Glu	Phe	Phe	Glu	Ile	Tyr	Cys	Glu	Tyr
65					70					75				80	
Ile	Leu	Cys	Leu	Cys	Ser	Ala	Val	Pro	Glu	Leu	Lys				
			85						90						

&lt;210&gt; 521

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 521

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 60  
 attccagaag agatgcgcgc gcagctgcag ctgtccctgg tgcgctccca cgcggccggc  
 120  
 accggccctg aggtggaaga agaagtaatt cgcgcgctca tgctgctgcg cctatccacc  
 180  
 ctgtgtaccg gccgtaccgg cgtgcgcccc gtggtggttag aaacttatgc caaggcgctc  
 240  
 aacgccggca tcgtgccggg ggtgcgcgaa tacgggtcgc tgggctgctc cggcgacttg  
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 352

<210> 522  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 522  
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 20 25 30  
 Leu Val Arg Ser His Ala Ala Gly Thr Gly Pro Glu Val Glu Glu Glu  
 35 40 45  
 Val Ile Arg Ala Leu Met Leu Leu Arg Leu Ser Thr Leu Cys Thr Gly  
 50 55 60  
 Arg Thr Gly Val Arg Pro Val Val Val Glu Thr Tyr Ala Lys Ala Leu  
 65 70 75 80  
 Asn Ala Gly Ile Val Pro Gly Val Arg Glu Tyr Gly Ser Leu Gly Cys  
 85 90 95  
 Ser Gly Asp Leu Ala Pro Leu Ala His Cys Ala Leu Ala Leu Leu Gly  
 100 105 110  
 Glu Gly Glu Val Arg  
 115

<210> 523  
 <211> 693  
 <212> DNA  
 <213> Homo sapiens

<400> 523  
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 tcagagccac caagctgcgg caccatctaa ggagaacatg tcccctggag gtcctgttag  
 120  
 aagctcctgg ttgagaaggc cctgaagctg ggtggcatca atgtccagcc tctgctgagc  
 180  
 atatctgttg aaaatgcttt gttgggagcc atgttctgaa gggcttcctt tcattctgag  
 240  
 gttgaaatgg ctgctcaggt gcctgtcact gtctggcatt ttcaggaaga ttcggagcaa  
 300  
 gaactccgct gatcttctcc gtgtctgtgc aaccacaaca tagttcccag ggctcagatg  
 360  
 gtaagtcatg gtgaagttgc ggcggaattt attatttgag ctttggacag tgtttctgaa  
 420  
 cgaggaaaaa aacacgggtg gaaatttctc ccggaaccgc tgtgagccag ccagaatcac  
 480  
 ttggaaatcg agtggaaatt ttgcatcttc tgctttcaaa tttgatggtg tgacagcaac  
 540  
 tgtgacgcac acgacaacat tgggtgccttc cattggctct tgcacagaga agttgaattg  
 600  
 agcatcatctt ccgggtcctc ctggcggtgtt tcctagaatc attgcttctt aaacattatt  
 660  
 tgggaccatc cttcgtggag tgtgtttcca tgg  
 693

<210> 524  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<400> 524  
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 20 25 30  
 Val Thr Val Ala Val Thr Pro Ser Asn Leu Lys Ala Glu Asp Ala Lys  
 35 40 45  
 Phe Pro Leu Asp Phe Gln Val Ile Leu Ala Gly Ser Gln Arg Phe Arg  
 50 55 60  
 Glu Lys Phe Pro Pro Val Phe Phe Ser Ser Phe Arg Asn Thr Val Gln  
 65 70 75 80  
 Ser Ser Asn Asn Lys Phe Arg Arg Asn Phe Thr Met Thr Tyr His Leu  
 85 90 95  
 Ser Pro Gly Asn Tyr Val Val Val Ala Gln Thr Arg Arg Lys Ser Ala  
 100 105 110  
 Glu Phe Leu Leu Arg Ile Phe Leu Lys Met Pro Asp Ser Asp Arg His  
 115 120 125  
 Leu Ser Ser His Phe Asn Leu Arg Met Lys Gly Ser Pro Ser Glu His  
 130 135 140  
 Gly Ser Gln Gln Ser Ile Phe Asn Arg Tyr Ala Gln Gln Arg Leu Asp  
 145 150 155 160  
 Ile Asp Ala Thr Gln Leu Gln Gly Leu Leu Asn Gln Glu Leu Leu Thr  
 165 170 175  
 Gly Pro Pro Gly Asp Met Phe Ser Leu Asp Gly Ala Ala Ala Trp Trp  
 180 185 190  
 Leu

<210> 525  
 <211> 1101  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gtccctaccga gaccgatccg cagcggtttgg cccggtcgcg cctattgcat cgggagcccc  
 180  
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 300  
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 420



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 540  
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 600  
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 720  
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 1101

&lt;210&gt; 526

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 526

Met	Ala	Arg	Phe	Pro	Lys	Ala	Asp	Leu	Ala	Ala	Ala	Gly	Val	Met	Leu
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Leu	Cys	His	Phe	Phe	Thr	Asp	Gln	Phe	Gln	Phe	Ala	Asp	Gly	Lys	Pro
			20					25					30		
Gly	Asp	Gln	Ile	Leu	Asp	Trp	Gln	Tyr	Gly	Val	Thr	Gln	Ala	Phe	Pro
		35					40					45			
His	Thr	Glu	Glu	Glu	Val	Glu	Val	Asp	Ser	His	Ala	Tyr	Ser	His	Arg
	50					55					60				
Trp	Lys	Arg	Asn	Leu	Asp	Phe	Leu	Lys	Ala	Val	Asp	Thr	Asn	Arg	Ala
65			70							75				80	
Ser	Val	Gly	Gln	Asp	Ser	Leu	Glu	Pro	Arg	Ser	Phe	Thr	Asp	Leu	Leu
			85						90					95	
Leu	Asp	Asp	Gly	Gln	Asp	Asn	Asn	Thr	Gln	Ile	Glu	Glu	Asp	Thr	Asp
			100					105					110		
His	Asn	Tyr	Tyr	Ile	Ser	Arg	Ile	Tyr	Gly	Pro	Ser	Asp	Ser	Ala	Ser
		115					120					125			
Arg	Asp	Leu	Trp	Val	Asn	Ile	Asp	Gln	Met	Glu	Lys	Asp	Lys	Val	Lys
	130					135					140				
Ile	His	Gly	Ile	Leu	Ser	Asn	Thr	His	Arg	Gln	Ala	Ala	Arg	Val	Asn
145					150					155				160	
Leu	Ser	Phe	Asp	Phe	Pro	Phe	Tyr	Gly	His	Phe	Leu	Arg	Glu	Ile	Thr
			165					170						175	
Val	Ala	Thr	Gly	Gly	Phe	Ile	Tyr	Thr	Gly	Glu	Val	Val	His	Arg	Met

			180						185						190							
Leu	Thr	Ala	Thr	Gln	Tyr	Ile	Ala	Pro	Leu	Met	Ala	Asn	Phe	Asp	Pro							
		195						200						205								
Ser	Val	Ser	Arg	Asn	Ser	Thr	Val	Arg	Tyr	Phe	Asp	Asn	Gly	Thr	Ala							
		210						215						220								
Leu	Val	Val	Gln	Trp	Asp	His	Val	His	Leu	Gln	Asp	Asn	Tyr	Asn	Leu							
225					230						235						240					
Gly	Ser	Phe	Thr	Phe	Gln	Ala	Thr	Leu	Leu	Met	Asp	Gly	Arg	Ile	Ile							
				245						250						255						
Phe	Gly	Tyr	Lys	Glu	Ile	Pro	Val	Leu	Val	Thr	Gln	Ile	Ser	Ser	Thr							
		260						265						270								
Asn	His	Pro	Val	Lys	Val	Gly	Leu	Ser	Asp	Ala	Phe	Val	Val	Val	His							
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Arg	Ile																					
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<210> 527
<211> 5343
<212> DNA
<213> Homo sapiens
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120
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300
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420
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480
gctttacaag catgcaatca gtttgactgc cctcctggct ggcacattga agaatggcag
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720
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780
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840
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900
aaacttgggt agcaggggtc gcagatcctc agtgtccaga gagtctacat tcagacaagg
960

```

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 5340  
 tat  
 5343

&lt;210&gt; 528

&lt;211&gt; 886

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 528

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Glu	Glu	Glu	Cys	Glu	Gly	Pro	Lys	Leu	Pro	Thr	Glu	Arg	Pro	Cys	Phe
		20				25					30				
Leu	Glu	Ala	Cys	Asp	Glu	Ser	Pro	Ala	Ser	Arg	Glu	Leu	Asp	Ile	Pro
	35					40					45				
Leu	Pro	Glu	Asp	Ser	Glu	Thr	Ala	Tyr	Asp	Trp	Glu	Tyr	Ala	Gly	Phe

50	55	60
Thr Pro Cys Thr Ala	Thr Cys Leu Gly Gly His	Gln Glu Ala Ile Ala
65	70	75
Val Cys Leu His Ile	Gln Thr Gln Gln Thr Val	Asn Asp Ser Leu Cys
85	90	95
Asp Met Val His Arg	Pro Pro Ala Met Ser Gln	Ala Cys Asn Thr Glu
100	105	110
Pro Cys Pro Pro Arg	Trp His Val Gly Ser Trp	Gly Pro Cys Ser Ala
115	120	125
Thr Cys Gly Val Gly	Ile Gln Thr Arg Asp Val	Tyr Cys Leu His Pro
130	135	140
Gly Glu Thr Pro Ala	Pro Pro Glu Glu Cys Arg	Asp Glu Lys Pro His
145	150	155
Ala Leu Gln Ala Cys	Asn Gln Phe Asp Cys Pro	Pro Gly Trp His Ile
165	170	175
Glu Glu Trp Gln Gln	Cys Ser Arg Thr Cys Gly	Gly Gly Thr Gln Asn
180	185	190
Arg Arg Val Thr Cys	Arg Gln Leu Leu Thr Asp	Gly Ser Phe Leu Asn
195	200	205
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Cys Ala Arg Thr Asp	Cys Pro Pro His Leu Ala	Val Gly Asp Trp Ser
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Lys Cys Ser Val Ser	Cys Gly Val Gly Ile Gln	Arg Arg Lys Gln Val
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Cys Gln Arg Leu Ala	Ala Lys Gly Arg Arg Ile	Pro Leu Ser Glu Met
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275	280	285
Pro Glu Cys Ser Lys	Ile Lys Ser Glu Met Lys	Thr Lys Leu Gly Glu
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Gln Gly Pro Gln Ile	Leu Ser Val Gln Arg Val	Tyr Ile Gln Thr Arg
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Glu Glu Lys Arg Ile	Asn Leu Thr Ile Gly	Ser Arg Ala Tyr Leu Leu
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Pro Asn Thr Ser Val	Ile Ile Lys Cys Pro Val	Arg Arg Phe Gln Lys
340	345	350
Ser Leu Ile Gln Trp	Glu Lys Asp Gly Arg Cys	Leu Gln Asn Ser Lys
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Arg Leu Gly Ile Thr	Lys Ser Gly Ser Leu Lys	Ile His Gly Leu Ala
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Ala Pro Asp Ile Gly	Val Tyr Arg Cys Ile Ala	Gly Ser Ala Gln Glu
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Pro Ala Leu Arg Glu	Pro Met Arg Glu Tyr	Pro Gly Met Asp His Ser
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<210> 529

<211> 4566

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 529

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&lt;210&gt; 530

&lt;211&gt; 802

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 530

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Glu Leu Lys Arg Ala Gly Pro Arg Arg Ala Ser Pro Glu Gly Cys
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 50           55           60
Ala Arg Gly Ala Gln Leu Trp Pro Pro Gly Ser Asp Pro Asp Gly Gly
 65           70           75           80
Pro Arg Asp Arg Asn Phe Leu Phe Val Gly Val Met Thr Ala Gln Lys
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Tyr Leu Gln Thr Arg Ala Val Ala Ala Tyr Arg Thr Trp Ser Lys Thr
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Ile Pro Gly Lys Val Gln Phe Phe Ser Ser Glu Gly Ser Asp Thr Ser
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Val Pro Ile Pro Val Val Pro Leu Arg Gly Val Asp Asp Ser Tyr Pro
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Pro Gln Lys Lys Ser Phe Met Met Leu Lys Tyr Met His Asp His Tyr
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Leu Asp Lys Tyr Glu Trp Phe Met Arg Ala Asp Asp Asp Val Tyr Ile
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Pro Leu Phe Leu Gly Gln Thr Gly Leu Gly Thr Thr Glu Glu Met Gly
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Lys Leu Ala Leu Glu Pro Gly Glu Asn Phe Cys Met Gly Gly Pro Gly
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Val Ile Met Ser Arg Glu Val Leu Arg Arg Met Val Pro His Ile Gly
 225          230          235          240
Lys Cys Leu Arg Glu Met Tyr Thr Thr His Glu Asp Val Glu Val Gly
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Arg Cys Val Arg Arg Phe Ala Gly Val Gln Cys Val Trp Ser Tyr Glu
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Met Gln Gln Leu Phe Tyr Glu Asn Tyr Glu Gln Asn Lys Lys Gly Tyr
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Ile Arg Asp Leu His Asn Ser Lys Ile His Gln Ala Ile Thr Leu His
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Pro Asn Lys Asn Pro Pro Tyr Gln Tyr Arg Leu His Ser Tyr Met Leu
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Ile	Asn	Gln	Glu	Ser	Gly	Ser	Leu	Ser	Phe	Leu	Ser	Asn	Ser	Leu	Lys											
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<210> 531

<211> 321

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 531

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&lt;210&gt; 532

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 532

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&lt;210&gt; 533

&lt;211&gt; 335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 533

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<210> 534  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 534  
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 Lys Val Thr Leu Thr Asn Ile Asp Asn Val Leu Asn Lys Asp His Leu  
 50 55 60  
 Arg Trp Leu His Phe Leu Leu Glu Gly Arg Leu Glu Pro Asn Val Arg  
 65 70 75 80  
 Leu Ile Val Gln Gly Tyr Cys Ser Pro Gly Lys Leu Tyr Arg Lys Leu  
 85 90 95  
 Glu Glu Leu Tyr Ala Pro Ser  
 100

<210> 535  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 535  
 acgctctct acagccggac taagcacagg ctacgccccg gtcgccatgc gcccaggctc  
 60  
 gggtatcagc cgaggaatcc acggcgaaat gaccagtagc ggccctaata caactatgct  
 120  
 gccgagcagc agacgtcgag gtcgggtcat gaggatgccg acggccaccg cgaccgggta  
 180  
 taccacaaat gcaggaacaa ggctgatagc tagggctgac cacagagcca ggccgcctgc  
 240  
 cgaggaaacg cccccacct ggtgactgcc agtatcagca ccgcgcagct caacgacgtc  
 300  
 aacagtctcg ggattgacca accgccacgt atgcagggcc atgtggggga gaatcaccac  
 360  
 caacgccaat gctgtcaccg agcctcgggc taggccgccg gc  
 402

<210> 536  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 536  
 Met Ala Leu His Thr Trp Arg Leu Val Asn Pro Glu Thr Val Asp Val  
 1 5 10 15  
 Val Glu Leu Arg Gly Ala Asp Thr Gly Ser His Gln Val Gly Gly Val  
 20 25 30  
 Ser Ser Ala Gly Gly Leu Ala Leu Trp Ser Ala Leu Ala Ile Ser Leu

```

          35          40          45
Val Pro Ala Leu Trp Val Tyr Pro Val Ala Val Ala Val Gly Ile Leu
          50          55          60
Met Thr Arg Pro Arg Arg Leu Leu Leu Gly Ser Ile Val Val Leu Gly
65          70          75          80
Pro Leu Leu Val Ile Ser Pro Trp Ile Pro Arg Leu Ile Thr Glu Pro
          85          90          95
Gly Arg Met Ala Thr Gly Ala Glu Pro Val Leu Ser Pro Ala Val Glu
          100          105          110
Thr Arg

```

<210> 537  
 <211> 404  
 <212> DNA  
 <213> Homo sapiens

```

<400> 537
gtgcacatcg gcggcaccga cttcgacaaa caactctcgc tggctggcat gatgccgctg
60
ttcggctacg gcagccgcat gaagagcggc gcctacatgc ccaccagcca ccacatgaac
120
ctggcgacct ggacacccat caactcgggtg tactcgcaaa aatcccagct ggccctgggc
180
agcatgcgct acgacatcga agacaccggc ggcatcgacc gcctgttcaa gctgatcgaa
240
cagcgtgctg ggcaactggct tgccatggaa gtggaagaaa ccaagatcca gctcacccat
300
caagacagcc gccacgtgcc gctggaccgc atcgaagcgg gcctgagcgt agacctgagc
360
cgggcgctgt tcgaatcgtc catcgacaac ctgctcgaac gcgt
404

```

<210> 538  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

```

<400> 538
Met Met Pro Leu Phe Gly Tyr Gly Ser Arg Met Lys Ser Gly Ala Tyr
1          5          10          15
Met Pro Thr Ser His His Met Asn Leu Ala Thr Trp His Thr Ile Asn
          20          25          30
Ser Val Tyr Ser Gln Lys Ser Gln Leu Ala Leu Gly Ser Met Arg Tyr
          35          40          45
Asp Ile Glu Asp Thr Gly Gly Ile Asp Arg Leu Phe Lys Leu Ile Glu
          50          55          60
Gln Arg Ala Gly His Trp Leu Ala Met Glu Val Glu Glu Thr Lys Ile
65          70          75          80
Gln Leu Thr His Gln Asp Ser Arg His Val Pro Leu Asp Arg Ile Glu
          85          90          95
Ala Gly Leu Ser Val Asp Leu Ser Arg Ala Leu Phe Glu Ser Ser Ile
          100          105          110
Asp Asn Leu Leu Glu Arg

```

115

&lt;210&gt; 539

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 539

```

nnacgcgtga aaaagaagaa aatgaaggaa agcgaggctg acagcgaggt gaagcatcaa
60
ccaattttca taaaagaaaag attgaagctt tttgaaatac tgaagaaaga ccatcagctc
120
ttacttgcca tttatggaaa aaagggggat acaagcaaca tcatcacagt aagagtggct
180
gatgggcaaa cagtgcaagg ggaagtctgg aaaacaacgc cttaccaagt ggctgctgaa
240
attagtcagg aactggctga aagcacggta atagccaaag tcaatgggtga actgtggggac
300
ctggaccgcc cattggaagg ggactcttct ctagagctgc ttacatttga taatgaggaa
360
gctcaagctg tgagtatttt aaaaccagac agccaaactt tgggtagtta tgttgtaaac
420
tacattatat aagaggccac atattgaatt cacgaatgtt gagttttttg ggggtttcta
480
agatttaaaa tttgattatt gatgtttaat aaatatttgc ctcatgaatg ttaa
534

```

&lt;210&gt; 540

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 540

```

Xaa Arg Val Lys Lys Lys Lys Met Lys Glu Ser Glu Ala Asp Ser Glu
1           5           10           15
Val Lys His Gln Pro Ile Phe Ile Lys Glu Arg Leu Lys Leu Phe Glu
20           25           30
Ile Leu Lys Lys Asp His Gln Leu Leu Leu Ala Ile Tyr Gly Lys Lys
35           40           45
Gly Asp Thr Ser Asn Ile Ile Thr Val Arg Val Ala Asp Gly Gln Thr
50           55           60
Val Gln Gly Glu Val Trp Lys Thr Thr Pro Tyr Gln Val Ala Ala Glu
65           70           75           80
Ile Ser Gln Glu Leu Ala Glu Ser Thr Val Ile Ala Lys Val Asn Gly
85           90           95
Glu Leu Trp Asp Leu Asp Arg Pro Leu Glu Gly Asp Ser Ser Leu Glu
100          105          110
Leu Leu Thr Phe Asp Asn Glu Glu Ala Gln Ala Val Ser Ile Leu Lys
115          120          125
Pro Asp Ser Gln Thr Leu Gly Ser Tyr Val Val Asn Tyr Ile Ile
130          135          140

```

&lt;210&gt; 541

&lt;211&gt; 551



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 541

```

ggtagcgagc tgcgcgtgtg gtatgaggcc ttctatgcca agaagatgga caagcccatg
60
ctgaagcagg ccggtctctg cgtccacgct gcaggcacc cagaaaacag cgcccccggtg
120
gagtcggagc ccagccagtgt ggcgtgtaaa gtgtgttctg ccaccttctt ggagctgcag
180
ctctcaatg gtaaggagga cgtgtgggga gcccagttg taaaactctt gtgtcgattt
240
ctctctgact tacgctgtca cctgtctgct gctgtcgggg gtgtcccaga ctttgtctctg
300
tctgccccat tgccccacaa tgtagtctgc agaaccaagg ctttctcagg gtttaaagct
360
tctgggcagt cccgcttccc acccccagcc cctgcaggcc tcaactctca ctctctctgg
420
ttgggaagtt gcatttcagc tgggcgcctt gactctggag cactggcagg ggccaggggc
480
caggagccag ccgtggcatg tgttgtgcac tcttgctttt gttgtctcta cttgacagcc
540
ccctcacgct t
551

```

&lt;210&gt; 542

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 542

```

Met Asp Lys Pro Met Leu Lys Gln Ala Gly Ser Gly Val His Ala Ala
1      5      10      15
Gly Thr Pro Glu Asn Ser Ala Pro Val Glu Ser Glu Pro Ser Gln Trp
20     25     30
Ala Cys Lys Val Cys Ser Ala Thr Phe Leu Glu Leu Gln Leu Leu Asn
35     40     45
Gly Lys Glu Asp Val Trp Gly Ala Pro Val Val Lys Leu Leu Cys Arg
50     55     60
Phe Leu Ser Asp Leu Arg Cys His Leu Ser Ala Ala Val Gly Gly Val
65     70     75     80
Pro Asp Phe Val Leu Ser Ala Pro Leu Pro His Asn Val Val Ala Arg
85     90     95
Thr Lys Ala Phe Ser Gly Phe Lys Ala Ser Gly Gln Ser Arg Phe Pro
100    105    110
Pro Pro Thr Pro Ala Gly Leu Thr Pro His Ser Ser Trp Leu Gly Ser
115    120    125
Cys Ile Ser Ala Gly Arg Leu Asp Ser Gly Ala Leu Ala Gly Ala Arg
130    135    140
Gly Gln Glu Pro Ala Val Ala Cys Val Val His Ser Cys Leu Cys Cys
145    150    155    160
Leu Tyr Leu Thr Ala Pro Ser Arg
165

```

<210> 543  
 <211> 349  
 <212> DNA  
 <213> Homo sapiens

<400> 543  
 nnaaagccgg acatgaatac ccgcattgct ggcaaaactg tcctgaccat cattctggcc  
 60  
 gggggcaaag gcagccgcct ggccccgatg accgatcagg tggccaaacc agccgtgccg  
 120  
 tttatgggga cgtaccgcct gattgacttt tcgctgtcca acattgtcca cagcggcttg  
 180  
 caggacgtct ggatcattga gcaaaacctg ccccatagct taaacgagca cctggctggg  
 240  
 gggcgctcct gggatctgga ccgcacccgc ggtggcctga aggtcatgcc gcccttttcc  
 300  
 ggccctgccg atgaggacgg tggcttttcc gaaggcaacg cacacgcgt  
 349

<210> 544  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 544  
 Xaa Lys Pro Asp Met Asn Thr Arg Ile Ala Gly Lys Thr Val Leu Thr  
 1 5 10 15  
 Ile Ile Leu Ala Gly Gly Lys Gly Ser Arg Leu Ala Pro Met Thr Asp  
 20 25 30  
 Gln Val Ala Lys Pro Ala Val Pro Phe Met Gly Thr Tyr Arg Leu Ile  
 35 40 45  
 Asp Phe Ser Leu Ser Asn Ile Val His Ser Gly Leu Gln Asp Val Trp  
 50 55 60  
 Ile Ile Glu Gln Asn Leu Pro His Ser Leu Asn Glu His Leu Ala Gly  
 65 70 75 80  
 Gly Arg Ser Trp Asp Leu Asp Arg Thr Arg Gly Gly Leu Lys Val Met  
 85 90 95  
 Pro Pro Phe Ser Gly Pro Ala Asp Glu Asp Gly Gly Phe Ser Glu Gly  
 100 105 110  
 Asn Ala His Ala  
 115

<210> 545  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 545  
 catgatgcaa aaacagacat gcttattttca aaatataaaa gtgaaaaaga tcgttttagca  
 60  
 caagaaattg ttggtgtcat cacaggttct gcaatgccgg gtggttcagc aaaccgtatc  
 120  
 ccaataaaag caggctcaaa tccagaaggt tctattgcaa cgcgttttat tgcagaaaca  
 180

atgtataacg aactcaaaac agtggattta actattcaaa atgctggcgg tgtacgcgca  
 240  
 gatattttac cggggaatgt aacctttaac gatgcttata ctttcttacc tttcgggaat  
 300  
 acgttatata cctataaaat ggaaagttca ttagtgaaac aagtgcttga agatgcaatg  
 360  
 ctatttgctt tgggtccccc cccccccccc  
 390

<210> 546

<211> 130

<212> PRT

<213> Homo sapiens

<400> 546

His	Asp	Ala	Lys	Thr	Asp	Met	Leu	Ile	Ser	Lys	Tyr	Lys	Ser	Glu	Lys
1				5					10					15	
Asp	Arg	Leu	Ala	Gln	Glu	Ile	Val	Gly	Val	Ile	Thr	Gly	Ser	Ala	Met
			20					25					30		
Pro	Gly	Gly	Ser	Ala	Asn	Arg	Ile	Pro	Asn	Lys	Ala	Gly	Ser	Asn	Pro
			35				40					45			
Glu	Gly	Ser	Ile	Ala	Thr	Arg	Phe	Ile	Ala	Glu	Thr	Met	Tyr	Asn	Glu
			50			55				60					
Leu	Lys	Thr	Val	Asp	Leu	Thr	Ile	Gln	Asn	Ala	Gly	Gly	Val	Arg	Ala
65					70				75					80	
Asp	Ile	Leu	Pro	Gly	Asn	Val	Thr	Phe	Asn	Asp	Ala	Tyr	Thr	Phe	Leu
				85				90						95	
Pro	Phe	Gly	Asn	Thr	Leu	Tyr	Thr	Tyr	Lys	Met	Glu	Ser	Ser	Leu	Val
			100				105						110		
Lys	Gln	Val	Leu	Glu	Asp	Ala	Met	Leu	Phe	Ala	Leu	Gly	Pro	Pro	Pro
			115				120					125			
Pro	Pro														
															130

<210> 547

<211> 306

<212> DNA

<213> Homo sapiens

<400> 547

aagcttggtt ttctgatttt tattcaaata tctatcatgg atgaagcatg cagtttcaga  
 60  
 atcagttcag tgttgacaac atatcaagat attctgcagt caatctcaat gtatgttcat  
 120  
 gaagcctcca acatattttg tgggatacca tctttgtcag gcattgtgct aggcaactgtc  
 180  
 cctgcagtga ataagaaaga caggatttct gtatttatgg ggcttagtac caagttgttc  
 240  
 tcaaactttc atgtttgtgt atacaaatca gctgaggcct tcactaaact cnnnnnccnn  
 300  
 nncenn  
 306

<210> 548

<211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 548  
 Met Asp Glu Ala Cys Ser Phe Arg Ile Ser Ser Val Leu Thr Thr Tyr  
 1 5 10 15  
 Gln Asp Ile Leu Gln Ser Ile Ser Met Tyr Val His Glu Ala Ser Asn  
 20 25 30  
 Ile Phe Cys Gly Ile Pro Ser Leu Ser Gly Ile Val Leu Gly Thr Val  
 35 40 45  
 Pro Ala Val Asn Lys Lys Asp Arg Ile Ser Val Phe Met Gly Leu Ser  
 50 55 60  
 Thr Lys Leu Phe Ser Asn Phe His Val Cys Val Tyr Lys Ser Ala Glu  
 65 70 75 80  
 Ala Phe Thr Lys Leu Xaa Xaa Xaa Xaa Xaa  
 85 90

<210> 549  
 <211> 780  
 <212> DNA  
 <213> Homo sapiens

<400> 549  
 nnacgcgtac ttccaacacc tatgctccag tatggaggac gggtaaagtc tcttggtta  
 60  
 gttttaatca tacacatatt gtctgtaagt atgaagagaa aggcataatca gaaatatttc  
 120  
 aattcagcga tttgaaatgt ttactttctg tttattgaaa atttttgttc tttttcacca  
 180  
 tggtattttt ttctcctcgt gtagaatcgg acagtagcaa caccgagcca tggagtatgg  
 240  
 gacatgcgag ggaaacaatt ccacacagga gttgaaatca aaatgtgggc tatcgcttgt  
 300  
 tttgccacac agaggcagtg cagagaagaa atattgaagg gtttcacaga ccagctgcgt  
 360  
 aagatttcta aggatgcagg gatgcccatc cagggccagc catgcttctg caaatatgca  
 420  
 cagggggcag acagcgtaga gcccatgttc cggcatctca agaacacata ttctggccta  
 480  
 cagcttatta tcgtcatcct gccggggaag acaccagtgt atgcggaagt gaaacgtgta  
 540  
 ggagacacac ttttgggtat ggctacacaa tgtgttcaag tcaagaatgt aataaaaaca  
 600  
 tctcctcaaa ctctgtcaaa cttgtgccta aagataaatg ttaaaactcg agggatcaat  
 660  
 aatattcttg tacctcatca aagaccttct gtgttccagc aaccagtgat ctttttggga  
 720  
 gccgatgtca ctcatccacc tgctgggtgat ggaaagaagc cttctattgc tgctgttgta  
 780

<210> 550  
 <211> 192  
 <212> PRT

<213> Homo sapiens

<400> 550

```

Asn Arg Thr Val Ala Thr Pro Ser His Gly Val Trp Asp Met Arg Gly
 1           5           10           15
Lys Gln Phe His Thr Gly Val Glu Ile Lys Met Trp Ala Ile Ala Cys
           20           25           30
Phe Ala Thr Gln Arg Gln Cys Arg Glu Glu Ile Leu Lys Gly Phe Thr
           35           40           45
Asp Gln Leu Arg Lys Ile Ser Lys Asp Ala Gly Met Pro Ile Gln Gly
 50           55           60
Gln Pro Cys Phe Cys Lys Tyr Ala Gln Gly Ala Asp Ser Val Glu Pro
 65           70           75           80
Met Phe Arg His Leu Lys Asn Thr Tyr Ser Gly Leu Gln Leu Ile Ile
           85           90           95
Val Ile Leu Pro Gly Lys Thr Pro Val Tyr Ala Glu Val Lys Arg Val
           100          105          110
Gly Asp Thr Leu Leu Gly Met Ala Thr Gln Cys Val Gln Val Lys Asn
           115          120          125
Val Ile Lys Thr Ser Pro Gln Thr Leu Ser Asn Leu Cys Leu Lys Ile
           130          135          140
Asn Val Lys Leu Gly Gly Ile Asn Asn Ile Leu Val Pro His Gln Arg
 145          150          155          160
Pro Ser Val Phe Gln Gln Pro Val Ile Phe Leu Gly Ala Asp Val Thr
           165          170          175
His Pro Pro Ala Gly Asp Gly Lys Lys Pro Ser Ile Ala Ala Val Val
           180          185          190

```

<210> 551

<211> 291

<212> DNA

<213> Homo sapiens

<400> 551

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nnggatccgg attatggggc tattgctaac aggtcaacgg ccatcaaggt gctcggtgcc
 60
gtggcaccgc cagccccgga gcctactcgc gagccaccga cgaactccgc tccttccgag
 120
gaaccgtcct cgtcgtcaat cgcaccgggc cgcgcggccc cgacgactgc agtaccacg
 180
actagttcgt cgtcggggccg ctgaccgatg cgcccatcgg cgggctcatc tggtgggcgc
 240
tagcgggggc ttcgatgtcc ccataccaca gcgtccgcta aattgccnc c
 291

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<210> 552

<211> 67

<212> PRT

<213> Homo sapiens

<400> 552

```

Xaa Asp Pro Asp Tyr Gly Ala Ile Ala Asn Arg Ser Thr Ala Ile Lys
 1           5           10           15
Val Leu Val Ala Val Ala Pro Pro Ala Pro Glu Pro Thr Arg Glu Pro

```

```

                20                25                30
Pro Thr Asn Ser Ala Pro Ser Glu Glu Pro Ser Ser Ser Ser Ile Ala
      35                40                45
Pro Val Pro Pro Ala Pro Thr Thr Ala Val Pro Thr Thr Ser Ser Ser
      50                55                60
Ser Gly Arg
65

```

<210> 553  
 <211> 471  
 <212> DNA  
 <213> Homo sapiens

```

<400> 553
ctagccgatg taggattagt aggttttccg agcgtgggta aatctacctt actctcaata
60
gtatctaaag ccaaaccgaa aattggtgca tatcatttca ctacaattaa acctaactta
120
ggtgttgttt ccacaaaaga tcaacgtagt tttgttatgg cagatttacc aggtttaatt
180
gaaggtgcat ctgatggcgt tggattagga catcaatttt taagacatgt agagagaaca
240
aaagttattg ttcacatgat tgatatgagc ggttctgaag gtagagaacc tattgaagat
300
tataaagtca ttaatcaaga attagctgcg tacgagcaac gtttagaaga tagacctcaa
360
atcgtagtag ctaacaagat ggattttacct gaatcacaag ataattttaa cttgttttaa
420
gaagaaattg gcgaagatgt gccagttatt ccagtttcaa caataacgcg t
471

```

<210> 554  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

```

<400> 554
Leu Ala Asp Val Gly Leu Val Gly Phe Pro Ser Val Gly Lys Ser Thr
1      5      10      15
Leu Leu Ser Ile Val Ser Lys Ala Lys Pro Lys Ile Gly Ala Tyr His
      20      25      30
Phe Thr Thr Ile Lys Pro Asn Leu Gly Val Val Ser Thr Lys Asp Gln
      35      40      45
Arg Ser Phe Val Met Ala Asp Leu Pro Gly Leu Ile Glu Gly Ala Ser
      50      55      60
Asp Gly Val Gly Leu Gly His Gln Phe Leu Arg His Val Glu Arg Thr
65      70      75      80
Lys Val Ile Val His Met Ile Asp Met Ser Gly Ser Glu Gly Arg Glu
      85      90      95
Pro Ile Glu Asp Tyr Lys Val Ile Asn Gln Glu Leu Ala Ala Tyr Glu
      100     105     110
Gln Arg Leu Glu Asp Arg Pro Gln Ile Val Val Ala Asn Lys Met Asp
      115     120     125
Leu Pro Glu Ser Gln Asp Asn Leu Asn Leu Phe Lys Glu Glu Ile Gly

```

130 135 140  
 Glu Asp Val Pro Val Ile Pro Val Ser Thr Ile Thr Arg  
 145 150 155

<210> 555  
 <211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 555  
 tctagagatt gagaacaatt atggatacag aaatggttga ttccgtcaaa tatattcgag  
 60  
 attcggaatc atgtgaggct cgctgctgg agatcttagc cagaaggccg tccatgatgg  
 120  
 tgcagatctt gcgtggcgac ggcttaatta acgaagacca gagattagtc agattatggc  
 180  
 ttaataaagt acctagaatt gtctgcctgc ttctccggct tagtggtggtc gtcgctgcgg  
 240  
 caataggtgc ccgtgcggta tgggcggcgg cttccggtaa tcccgatctt gttcacgcgt  
 300

<210> 556  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 556  
 Met Asp Thr Glu Met Val Asp Ser Val Lys Tyr Ile Arg Asp Ser Glu  
 1 5 10 15  
 Ser Cys Glu Ala Arg Val Leu Glu Ile Leu Ala Arg Arg Pro Ser Met  
 20 25 30  
 Met Val Gln Ile Leu Arg Gly Asp Gly Leu Ile Asn Glu Asp Gln Arg  
 35 40 45  
 Leu Val Arg Leu Trp Leu Asn Lys Val Pro Arg Ile Val Arg Leu Leu  
 50 55 60  
 Leu Arg Leu Ser Val Phe Val Ala Ala Ala Ile Gly Ala Arg Ala Val  
 65 70 75 80  
 Trp Ala Ala Ala Ser Gly Asn Pro Asp Leu Val His Ala  
 85 90

<210> 557  
 <211> 678  
 <212> DNA  
 <213> Homo sapiens

<400> 557  
 atcttcccgg tttatgagga gaatgcgctg cgtgtcgagt ttttcggcga cgaaattgag  
 60  
 gccctcacga cgatgcaccc gctcaccggg gaggtcatca gcgaggacga gcaggtctac  
 120  
 gtgttcccgg ctaccacta tgctgccggc ccggaacgta tggagcgggc catagcgtcc  
 180  
 atccagcagg agctcgagga gcgcctggcc gttctagagc gtgatgggaa actggttgag  
 240

gcccaacggt tacgtatgcg tactacctac gatatcgaga tgatgcagca ggtcgggtgcc  
 300  
 tgtgctggca tcgaaaacta ttcgcggcac atcgacggac gcgctcccgg ctcagccccc  
 360  
 aactgtctgc ttgactactt tccggaagat tttgtgctcg tcattgatga atcccacgtg  
 420  
 accgtcccgc agattggcgg gatgtatgag ggggacatga gccgcaagcg gacattggta  
 480  
 gaacatgggt tccgactgcc cagcgcgatg gacaaccgtc ctctcaaatt cgacgagttc  
 540  
 acccagcgga tcggccagac tgtctacctg tccgccacgc ccggttcgta cgagaccgaa  
 600  
 cgagctcacg gcgtcgtcga acaaatcatt cgtccgacag gtctgggtgga tccggagatt  
 660  
 atcgtcaagc ctacgcgt  
 678

<210> 558

<211> 226

<212> PRT

<213> Homo sapiens

<400> 558

Ile	Phe	Pro	Val	Tyr	Glu	Glu	Asn	Ala	Leu	Arg	Val	Glu	Phe	Phe	Gly
1				5					10					15	
Asp	Glu	Ile	Glu	Ala	Leu	Thr	Thr	Met	His	Pro	Leu	Thr	Gly	Glu	Val
			20					25					30		
Ile	Ser	Glu	Asp	Glu	Gln	Val	Tyr	Val	Phe	Pro	Ala	Thr	His	Tyr	Val
			35				40					45			
Ala	Gly	Pro	Glu	Arg	Met	Glu	Arg	Ala	Ile	Ala	Ser	Ile	Gln	Gln	Glu
			50			55					60				
Leu	Glu	Glu	Arg	Leu	Ala	Val	Leu	Glu	Arg	Asp	Gly	Lys	Leu	Leu	Glu
65					70					75				80	
Ala	Gln	Arg	Leu	Arg	Met	Arg	Thr	Thr	Tyr	Asp	Ile	Glu	Met	Met	Gln
				85					90					95	
Gln	Val	Gly	Ala	Cys	Ala	Gly	Ile	Glu	Asn	Tyr	Ser	Arg	His	Ile	Asp
			100						105				110		
Gly	Arg	Ala	Pro	Gly	Ser	Ala	Pro	Asn	Cys	Leu	Leu	Asp	Tyr	Phe	Pro
			115					120				125			
Glu	Asp	Phe	Val	Leu	Val	Ile	Asp	Glu	Ser	His	Val	Thr	Val	Pro	Gln
			130			135					140				
Ile	Gly	Gly	Met	Tyr	Glu	Gly	Asp	Met	Ser	Arg	Lys	Arg	Thr	Leu	Val
145					150					155				160	
Glu	His	Gly	Phe	Arg	Leu	Pro	Ser	Ala	Met	Asp	Asn	Arg	Pro	Leu	Lys
				165					170					175	
Phe	Asp	Glu	Phe	Thr	Gln	Arg	Ile	Gly	Gln	Thr	Val	Tyr	Leu	Ser	Ala
			180					185					190		
Thr	Pro	Gly	Ser	Tyr	Glu	Thr	Glu	Arg	Ala	His	Gly	Val	Val	Glu	Gln
		195					200					205			
Ile	Ile	Arg	Pro	Thr	Gly	Leu	Val	Asp	Pro	Glu	Ile	Ile	Val	Lys	Pro
		210				215					220				
Thr	Arg														
225															



<210> 559  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 559  
 ggatcctatg gagctcaagt tcaagaaaag aaactgtaaa catggaggtt ttgtgataaa  
 60  
 tggaatgcag tcagagggaa ggaactgccn gcttaaagtg tcctatgctg cgctttccag  
 120  
 agcaatacag tacacagtgg agggcgctac catggagtct ctgggtgaaa gttaggatgg  
 180  
 tatgggtggca ccagccaaac ttctcagggt tcataggcag acagcagctc tggagtggaa  
 240  
 ctaaagtgtg tccaggagct gaagccctta atcagctagg gctcacacag agtcaaggta  
 300  
 gggccaacaaa cattcagttc gggaccatat ctaga  
 335

<210> 560  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 560  
 Met Glu Cys Ser Gln Arg Glu Gly Thr Ala Xaa Leu Lys Cys Pro Met  
 1 5 10 15  
 Leu Arg Phe Pro Glu Gln Tyr Ser Thr Gln Trp Arg Ala Leu Pro Trp  
 20 25 30  
 Ser Leu Trp Val Lys Val Arg Met Val Trp Trp His Gln Pro Asn Phe  
 35 40 45  
 Ser Gly Phe Ile Gly Arg Gln Gln Leu Trp Ser Gly Thr Lys Val Tyr  
 50 55 60  
 Pro Gly Ala Glu Ala Leu Asn Gln Leu Gly Leu Thr Gln Ser Gln Gly  
 65 70 75 80  
 Arg Val Lys Asn Ile Gln Ser Gly Thr Ile Ser Arg  
 85 90

<210> 561  
 <211> 477  
 <212> DNA  
 <213> Homo sapiens

<400> 561  
 ngcgcgcccc ctctctccgat ggcggcgag atccagccca agcctctgac ccgcaagccg  
 60  
 atcctgctgc agcggatgga ggggtcccag gaggtggtga atatggccgt gatcgtgccc  
 120  
 aaagaggagg gcgtcatcag cgtctccgag gacaggacag ttcgtgtttg gttaaagaga  
 180  
 gacagtggac agtattggcc aagcgtatac catgcaatgc cttgagttta tattgtcaga  
 240  
 agattataac aagatgactc ctgtgaaaaa ctatcaagcg catcagagca gagtgcagat  
 300

gatcctgttt gtcctggagc tggagtgggt gctgagcaca ggacaggaca agcaatttgc  
 360  
 ctggcactgc tctgagagtg ggcagcgcct gggaggttat cggaccagtg ctgtggcctc  
 420  
 aggcctgcaa tttgatgttg aaacccggca tgtgtttatc ggtgaccact caggcca  
 477

<210> 562  
 <211> 74  
 <212> PRT  
 <213> Homo sapiens

<400> 562  
 Xaa Ala Pro Pro Pro Pro Met Ala Ala Glu Ile Gln Pro Lys Pro Leu  
 1 5 10 15  
 Thr Arg Lys Pro Ile Leu Leu Gln Arg Met Glu Gly Ser Gln Glu Val  
 20 25 30  
 Val Asn Met Ala Val Ile Val Pro Lys Glu Glu Gly Val Ile Ser Val  
 35 40 45  
 Ser Glu Asp Arg Thr Val Arg Val Trp Leu Lys Arg Asp Ser Gly Gln  
 50 55 60  
 Tyr Trp Pro Ser Val Tyr His Ala Met Pro  
 65 70

<210> 563  
 <211> 403  
 <212> DNA  
 <213> Homo sapiens

<400> 563  
 ccatggcaga cagggagctg agcggcctgc ggaccaggt gcaccagagc atggtgcccc  
 60  
 tgctcctaca cctgaaggac caatgcccaa ctgtcgccac gggcaatgcc caccccaaga  
 120  
 aaaggaaggg aaaaggcctc aaccttggcc agggctggaa cccacaggag gccagggtag  
 180  
 ggggcagacg gatggcagca gcactgcctg agagttgggg gagctccac ggggcagcaa  
 240  
 gtggcgggca gagggctctg ccatctgcac tggtttctgt gaccacagtt ggctgcccc  
 300  
 ctccccact gcaccactga cgaagcgaga ccctgcctca aaaaaaaaaa caaaaacaaa  
 360  
 aacaaaaaca aaactcaaac ttcacactgg agatctgtgc aat  
 403

<210> 564  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 564  
 Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val His Gln Ser  
 1 5 10 15  
 Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro Thr Val Ala

	20						25					30			
Thr	Gly	Asn	Ala	His	Pro	Lys	Lys	Arg	Lys	Gly	Lys	Gly	Leu	Asn	Leu
	35						40					45			
Gly	Gln	Gly	Trp	Asn	Pro	Gln	Glu	Ala	Arg	Val	Arg	Gly	Arg	Arg	Met
	50						55					60			
Ala	Ala	Ala	Leu	Pro	Glu	Ser	Trp	Gly	Ser	Ser	His	Gly	Ala	Ala	Ser
65					70				75					80	
Gly	Gly	Gln	Arg	Val	Trp	Pro	Ser	Ala	Leu	Val	Ser	Val	Thr	Thr	Val
			85					90					95		
Gly	Leu	Pro	Ala	Pro	Pro	Leu	His	His							
	100						105								

&lt;210&gt; 565

&lt;211&gt; 311

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 565

```

ncctctccat ggagcagccc catcttcact cttcacctgg ggccaggcct tccacagcag
60
ccaccaccca gcgaccacag agaggctgcg cggaggacac aggagagagg gagcccacgg
120
gcacgatctc caccggcttt cccagctccc tgggtcagcc ccacgggacc tctctctctc
180
tctccacat ctccaagcca gccttgcata tagtaagagc tgtgatcagg atggaaagag
240
gcttggggccg cacagacctg gacaatgtcc cagtgagggc tggaggtgct agaagggcac
300
aggaggcccc n
311

```

&lt;210&gt; 566

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 566

Met	Glu	Gln	Pro	His	Leu	His	Ser	Ser	Pro	Gly	Ala	Arg	Pro	Ser	Thr
1				5					10					15	
Ala	Ala	Thr	Thr	Gln	Arg	Pro	Gln	Arg	Gly	Cys	Ala	Glu	Asp	Thr	Gly
		20						25					30		
Glu	Arg	Glu	Pro	Thr	Gly	Thr	Ile	Ser	Thr	Gly	Phe	Pro	Ser	Ser	Leu
	35					40					45				
Gly	Gln	Pro	His	Gly	Thr	Ser	Pro	Pro	Leu	Ser	His	Ile	Ser	Lys	Pro
	50				55					60					
Ala	Leu	His	Ile	Val	Arg	Ala	Val	Ile	Arg	Met	Glu	Arg	Gly	Leu	Gly
65				70					75					80	
Arg	Thr	Asp	Leu	Asp	Asn	Val	Pro	Val	Arg	Ala	Gly	Gly	Ala	Arg	Arg
			85					90						95	
Ala	Gln	Glu	Ala	Pro											
	100														

&lt;210&gt; 567

&lt;211&gt; 929

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 567

atcacatcgg tcgctgaacc ccgacgagcc tcaccttgct gaaatattca tccttgagat  
 60  
 cagcccacgt gccgtcgacc tctacctcgg tgagggtcgc gggcgggtac caacagccga  
 120  
 cctcgctctc ggctccactc atggcggcaa gttccgctgc cagtccgggg atcgtcgggg  
 180  
 catgggcat gatgagcagg ttatccacat cgtcgctgat ttctccgatg cgccgacgca  
 240  
 cggatcagt gccgcagtaa tagagggtc gcataaattc gaccggacaa tccagttgga  
 300  
 ggcagtccca ggtctggcgg gtgcgtaggg catcggagac cagagcatgt ccaacattgc  
 360  
 gcagtcctaa acgcgtgccg acctcacggg cctgacggcg cccacgctcg gtgagcggac  
 420  
 gctcccgatc cccgcccga gcatgggatg cgggctgtgc atgtctcatg aggaacagag  
 480  
 tgtgcatgga tccatcgttg cacttcgcgg tcgccgcgg tctacgatgt tggcatgccg  
 540  
 ttgacggatt tgggcattga tgaggcgcgt acctaccgcc cgaacgtccc tgaacccgat  
 600  
 ggtttcgact ctttttgggc cgagaccctc gatgagtatt ccggcgttcc ccaagatctg  
 660  
 acggcgggtgc ctttcgataa ccgtcaggct ctgatagata cctgggattt gtcgtgggtg  
 720  
 gggatcaca actctcgggt gagcgggtga ttacatgccc cagccgctgt gaacggccca  
 780  
 ttcccccttg tcatcgagta cctcgggtac tcgagttcgc gtggtgtgcc gattggatca  
 840  
 gtcttcgctg ctgctggcta tgcacatata gtcgtcgatc cacgtgggtca ggggtggggc  
 900  
 cacccaacct tgacggaaaa ctgtccgga  
 929

&lt;210&gt; 568

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 568

Met	Pro	Leu	Thr	Asp	Leu	Gly	Ile	Asp	Glu	Ala	Arg	Thr	Tyr	Arg	Pro
1			5						10					15	
Asn	Val	Pro	Glu	Pro	Asp	Gly	Phe	Asp	Ser	Phe	Trp	Ala	Glu	Thr	Leu
		20						25					30		
Asp	Glu	Tyr	Ser	Gly	Val	Pro	Gln	Asp	Leu	Thr	Ala	Val	Pro	Phe	Asp
		35				40						45			
Asn	Arg	Gln	Ala	Leu	Ile	Asp	Thr	Trp	Asp	Leu	Ser	Trp	Val	Gly	Tyr
	50					55					60				
His	Asn	Ser	Arg	Val	Ser	Gly									
65						70									

<210> 569  
 <211> 371  
 <212> DNA  
 <213> Homo sapiens

<400> 569  
 ncgcaaaactt caacgggtgcc atctgccata ttccagggat gccagatttg gatggaaaat  
 60  
 accatatcac tctcgattca gaattcgtag ttgatttagt ggctttaac aaaacgctac  
 120  
 ctgtcgatta cttaatgggc gaaggaacgg aacttgtgta ttcaaactg gaagaactac  
 180  
 ctgaatgccc atattatcca aaagatcaaa agccaatcgt gattgggaaa aacacaaaac  
 240  
 tcaaggaaca accaacagcc gttgctctct tctcgatgt tgataaacgg ccagagatta  
 300  
 aatcaaaaat cttagaccgc tatgataatg atattgaaat ccgtacttgg ggcggtactt  
 360  
 cccatgtcta n  
 371

<210> 570  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 570  
 Met Pro Asp Leu Asp Gly Lys Tyr His Ile Thr Leu Asp Ser Glu Phe  
 1 5 10 15  
 Val Leu Asp Leu Val Ala Phe Asn Lys Thr Leu Pro Val Asp Tyr Leu  
 20 25 30  
 Met Val Glu Gly Thr Glu Leu Val Tyr Ser Asn Met Glu Glu Leu Pro  
 35 40 45  
 Glu Cys Pro Tyr Tyr Pro Lys Asp Gln Lys Pro Ile Val Ile Gly Lys  
 50 55 60  
 Asn Thr Lys Leu Lys Glu Gln Pro Thr Ala Val Ala Leu Phe Ser Asp  
 65 70 75 80  
 Val Asp Lys Arg Pro Glu Ile Lys Ser Lys Ile Leu Asp Arg Tyr Asp  
 85 90 95  
 Asn Asp Ile Glu Ile Arg Thr Trp Gly Gly Thr Ser His Val Xaa  
 100 105 110

<210> 571  
 <211> 407  
 <212> DNA  
 <213> Homo sapiens

<400> 571  
 nacgcgtatc ttcgctgggc cacaccagac gtggcattaa acgacgtcac aagaacgaca  
 60  
 ccgggacctg acgggcccac gcacgaagag gccaaagacac tgaccgagac tactgtttcc  
 120  
 gttccacact ccttcgccga cctcggcgtc cgagaagata tctgccaggc gctggaaggg  
 180

gtgggaattg tctccccgtt cccgatccag gccatgtcga tcccgaattgc cgtcgagggc  
 240  
 acggatctta ttgggcaggc gcgtactggc actggcaaaa cactcgcctt cggcatcacc  
 300  
 atcttgcagc gcataccct gcccggtgac gaaggttggg aagaactcac caccaaaggc  
 360  
 aagcccccaa gcactcgtga tgtgcccta cccgggagct aggtcgg  
 407

<210> 572  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 572  
 Leu Thr Glu Thr Thr Val Ser Val Pro Thr Ser Phe Ala Asp Leu Gly  
 1 5 10 15  
 Val Arg Glu Asp Ile Cys Gln Ala Leu Glu Gly Val Gly Ile Val Ser  
 20 25 30  
 Pro Phe Pro Ile Gln Ala Met Ser Ile Pro Ile Ala Val Glu Gly Thr  
 35 40 45  
 Asp Leu Ile Gly Gln Ala Arg Thr Gly Thr Gly Lys Thr Leu Ala Phe  
 50 55 60  
 Gly Ile Thr Ile Leu Gln Arg Ile Thr Leu Pro Gly Asp Glu Gly Trp  
 65 70 75 80  
 Glu Glu Leu Thr Thr Lys Gly Lys Pro Pro Ser Thr Arg Asp Val Pro  
 85 90 95  
 Leu Pro Gly Ser  
 100

<210> 573  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 573  
 acgcgtctac cgtaggatcc atgaccttcc gcaagaccga ccaccacaag aacgccattg  
 60  
 actacgaggt cgccggacta atgtggctcg ctgctgcccg gccagatggg gccggcatcg  
 120  
 tcgaggtgct cgaccacggc aagggatggc tcaccgaacc cgaattgtcc actgggcacc  
 180  
 ccacccgcga ggcagccgag gactttggcc gccgactggc tcacacccac gcagccgggg  
 240  
 cctcacacct gggggctgca cctgacgggt ttgttcccga cgatgggtat atcggccgtg  
 300  
 ctcccctgcc actgccgtcc gaaccaatct cctcctgggg agagtgttac gctcagtgcc  
 360  
 gcatcgaacc atatatggac agtctcgacg ctg  
 393

<210> 574  
 <211> 124  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 574

```

Met Thr Phe Arg Lys Thr Asp His His Lys Asn Ala Ile Asp Tyr Glu
 1           5           10           15
Val Ala Gly Leu Met Trp Leu Ala Ala Arg Pro Asp Gly Ala Gly
      20           25           30
Ile Val Glu Val Leu Asp His Gly Lys Gly Trp Leu Thr Glu Pro Glu
      35           40           45
Leu Ser Thr Gly His Pro Thr Arg Glu Ala Ala Glu Asp Phe Gly Arg
      50           55           60
Arg Leu Ala His Thr His Ala Ala Gly Ala Ser His Leu Gly Ala Ala
      65           70           75           80
Pro Asp Gly Phe Val Pro Asp Asp Gly Tyr Ile Gly Arg Ala Pro Leu
      85           90           95
Pro Leu Pro Ser Glu Pro Ile Ser Ser Trp Gly Glu Phe Tyr Ala Gln
      100          105          110
Cys Arg Ile Glu Pro Tyr Met Asp Ser Leu Asp Ala
      115          120

```

&lt;210&gt; 575

&lt;211&gt; 372

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 575

```

nntatccatg cagacatggg accagggtct ctgagggcag gaagcaaagt gggtgagggg
60
gatgggacaa gatgccttgg tgctaaggcc tctggagctg gagctggtta tagggatgat
120
accaggcacc ctgagtcact cgcacctcac aatggggccg cttctgggag ccagtgggct
180
tatggggctg gcaatgtgct gggttatgag gatggatcag aacttccagg gcctcagggg
240
actgggggtca gaacagccta tggagaaagg tcaaggggcc ttgggcctag gagtacaggg
300
ccaggggggtg aggcaggctt tagagatggt tcaggaggcc tccaaggaat gggatcagca
360
gatgggcccc gt
372

```

&lt;210&gt; 576

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 576

```

Xaa Ile His Ala Asp Met Gly Pro Gly Ser Leu Arg Ala Gly Ser Lys
 1           5           10           15
Val Gly Glu Gly Asp Gly Thr Arg Cys Pro Gly Ala Lys Ala Ser Gly
      20           25           30
Ala Gly Ala Gly Tyr Arg Asp Asp Thr Arg His Pro Glu Ser Leu Ala
      35           40           45
Pro His Asn Gly Ala Ala Ser Gly Ser Gln Trp Ala Tyr Gly Ala Gly

```

```

      50              55              60
Asn Val Leu Gly Tyr Glu Asp Gly Ser Glu Leu Pro Gly Pro Gln Gly
65              70              75              80
Thr Gly Val Arg Thr Ala Tyr Gly Glu Arg Ser Arg Gly Leu Gly Pro
      85              90              95
Arg Ser Thr Gly Pro Gly Gly Glu Ala Gly Phe Arg Asp Gly Ser Gly
      100              105              110
Gly Leu Gln Gly Met Gly Ser Ala Asp Gly Pro Gly
      115              120

```

&lt;210&gt; 577

&lt;211&gt; 432

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 577

```

nagcgcaatg tcatgatgtc ggatttgtca atgtcggatt tctcatccca gccatcaccc
60
ccgcagcgcc gggcgcggat gaccagcggc cagcgccgtg aacagctcat cagcgtggcc
120
cgtcgcctct tcgcagacaa tggcatggca gggacctccg tcgaggagat cgccgctacc
180
gcgggagtct ccaaaccctg catctacgag catttcgggt ccaaggatgg gctgtacgcc
240
gtcgtcgtag accgcgaggt acgccaccta caagattccc tcaacgccgc catgaccgcg
300
ccaaagcaag gcccgaaacg caccctggag tcagcggtag tggccctgct ggactacatc
360
gacgaccgtc cagacgggtt tcggatcatc tcgcgagact cctcggtcgg ttcagccacc
420
ggttcgtacg cg
432

```

&lt;210&gt; 578

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 578

```

Met Thr Ser Gly Gln Arg Arg Glu Gln Leu Ile Ser Val Ala Arg Arg
1              5              10              15
Leu Phe Ala Asp Asn Gly Met Ala Gly Thr Ser Val Glu Glu Ile Ala
      20              25              30
Ala Thr Ala Gly Val Ser Lys Pro Val Ile Tyr Glu His Phe Gly Ser
      35              40              45
Lys Asp Gly Leu Tyr Ala Val Val Val Asp Arg Glu Val Arg His Leu
      50              55              60
Gln Asp Ser Leu Asn Ala Ala Met Thr Arg Pro Lys Gln Gly Pro Lys
65              70              75              80
Arg Thr Leu Glu Ser Ala Val Leu Ala Leu Leu Asp Tyr Ile Asp Asp
      85              90              95
Arg Pro Asp Gly Phe Arg Ile Ile Ser Arg Asp Ser Ser Val Gly Ser
      100              105              110
Ala Thr Gly Ser Tyr Ala

```



115

<210> 579  
 <211> 320  
 <212> DNA  
 <213> Homo sapiens

<400> 579  
 ggcccaaac actccgacct cagctgggtcc agcatgctgg gcaccgtgct gctgctggcc  
 60  
 ctgctcccag ggatcaccac cttaccacagc gggccacctg ctcccccggt ccccgaggcg  
 120  
 cccggccctt ggctgcgcag acccctcttc agcctgaagc tgtccgacac agaggacgtc  
 180  
 ttctctgcc gcgcggggcc gctcgaggtc ccggccgaca gccgcgtgtt cgtgcaggcg  
 240  
 gccttggtccc gtccctcccc gcgctggggc ctggccctgc accgctgctc agtgacgccg  
 300  
 tcctcacgcc cggccccggg  
 320

<210> 580  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 580  
 Met Leu Gly Thr Val Leu Leu Leu Ala Leu Leu Pro Gly Ile Thr Thr  
 1 5 10 15  
 Leu Pro Ser Gly Pro Pro Ala Pro Pro Phe Pro Ala Ala Pro Gly Pro  
 20 25 30  
 Trp Leu Arg Arg Pro Leu Phe Ser Leu Lys Leu Ser Asp Thr Glu Asp  
 35 40 45  
 Val Phe Pro Arg Arg Ala Gly Pro Leu Glu Val Pro Ala Asp Ser Arg  
 50 55 60  
 Val Phe Val Gln Ala Ala Leu Ala Arg Pro Ser Pro Arg Trp Gly Leu  
 65 70 75 80  
 Ala Leu His Arg Cys Ser Val Thr Pro Ser Ser Arg Pro Ala Pro  
 85 90 95

<210> 581  
 <211> 419  
 <212> DNA  
 <213> Homo sapiens

<400> 581  
 nacgacggca accattcgct gtggaaggag ctgaacggcc agctcgacgt gcagtttttc  
 60  
 cacgtcggca tgggcttcaa gacgccagta cgcattgcaca gcgtcgaccc caagaccgcg  
 120  
 gaagcccgcg aggtgcattt ccgcccgtcg ctgttcaact atgccaagac cacggtggac  
 180  
 accaagcagc tgaccggcga cctgggtttc tccggtttca agctgttcaa ggcgcggaa  
 240

ctggatcgcc atgacgtgct gtcgtttctc ggcgccagtt acttccgtgc ggtggacgca  
 300  
 acccgccagt acggcctctc cgcacgcggc ctggcgattg atacctacgc gaaaaaacgc  
 360  
 gaggaattcc ccgacttcac gcagttctgg ttcgaaaccc cgagcaagga cccacgcgt  
 419

<210> 582  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 582  
 Xaa Asp Gly Asn His Ser Leu Trp Lys Glu Leu Asn Gly Gln Leu Asp  
 1 5 10 15  
 Val Gln Phe Phe His Val Gly Met Gly Phe Lys Thr Pro Val Arg Met  
 20 25 30  
 His Ser Val Asp Pro Lys Thr Arg Glu Ala Arg Glu Val His Phe Arg  
 35 40 45  
 Pro Ser Leu Phe Asn Tyr Ala Lys Thr Thr Val Asp Thr Lys Gln Leu  
 50 55 60  
 Thr Gly Asp Leu Gly Phe Ser Gly Phe Lys Leu Phe Lys Ala Pro Glu  
 65 70 75 80  
 Leu Asp Arg His Asp Val Leu Ser Phe Leu Gly Ala Ser Tyr Phe Arg  
 85 90 95  
 Ala Val Asp Ala Thr Arg Gln Tyr Gly Leu Ser Ala Arg Gly Leu Ala  
 100 105 110  
 Ile Asp Thr Tyr Ala Lys Lys Arg Glu Glu Phe Pro Asp Phe Thr Gln  
 115 120 125  
 Phe Trp Phe Glu Thr Pro Ser Lys Asp Pro Arg  
 130 135

<210> 583  
 <211> 407  
 <212> DNA  
 <213> Homo sapiens

<400> 583  
 cttttgatca atgctgatgg cacgaagcta tcgaaaaggc cgggtgatgt ccgcgtagct  
 60  
 gattatatgg agcaggggatg ggagccggag acgctggtga acctagttgc cctcacgggc  
 120  
 tatagctatg cgaatttgga gcatgctgat catgatgtca agacgatgaa cgaactcatc  
 180  
 cgtgactttg agcttactcg tatctcccat acgcgagcca cactcccat ggacaagctt  
 240  
 gtgtttttga acaagcatca cttgacaaat aagctggcgc tcgccacgac gtgtgagcag  
 300  
 accaaacaag acctattgtc gcgtatccgg ccgatcacta cctcgtggta cggcgattat  
 360  
 tcagatgatt atatcctgcg cgtcgtaaca ctgggacccc aacgcgt  
 407

<210> 584

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 584

```

Leu Leu Ile Asn Ala Asp Gly Thr Lys Leu Ser Lys Arg Ser Gly Asp
 1           5           10           15
Val Arg Val Ala Asp Tyr Met Glu Gln Gly Trp Glu Pro Glu Thr Leu
      20           25           30
Val Asn Leu Val Ala Leu Thr Gly Tyr Ser Tyr Ala Asn Leu Glu His
      35           40           45
Ala Asp His Asp Val Lys Thr Met Asn Glu Leu Ile Arg Asp Phe Glu
      50           55           60
Leu Thr Arg Ile Ser His Thr Arg Ala Thr Leu Pro Met Asp Lys Leu
65           70           75           80
Val Phe Leu Asn Lys His His Leu Thr Asn Lys Leu Ala Leu Ala Thr
      85           90           95
Thr Cys Glu Gln Thr Lys Gln Asp Leu Leu Ser Arg Ile Arg Pro Ile
      100          105          110
Thr Thr Ser Trp Tyr Gly Asp Tyr Ser Asp Asp Tyr Ile Leu Arg Val
      115          120          125
Val Thr Leu Gly Pro Gln Arg
      130          135

```

&lt;210&gt; 585

&lt;211&gt; 502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 585

```

nnacgcgtcc tcgctggata tgaggctgtg aagaggggaac gctgcgtcat tgatctggac
60
gatattttgt tgtgcgcggt gggattgttg gttcagcacc gtgacatcac tgaggagatt
120
cgggctcggt accgacattt cgttgtcgac gaataccagg acgtttctcc gctgcagcat
180
aggttgcttg aactgtggtt tggcgatcga aatgatgtat gcgtcgtggg agatccgcac
240
caggccattc actcttatgc aggcgcacga gctgaactacc tcctcgactt cgttgccgat
300
catcctggcg ctaaacgcat cgatttggtt cgcaactacc gctccactcc cgagatcggt
360
cagttggcca atgaagttct tgtcaaccgt atgactccag aggaggcttt ggaacatggc
420
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480
ggggacgatg cctccgaagc tt
502

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&lt;210&gt; 586

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 586

Xaa Arg Val Leu Ala Gly Tyr Glu Ala Val Lys Arg Glu Arg Cys Val  
 1 5 10 15  
 Ile Asp Leu Asp Asp Ile Leu Leu Cys Ala Val Gly Leu Leu Val Gln  
 20 25 30  
 His Arg Asp Ile Thr Glu Glu Ile Arg Ala Arg Tyr Arg His Phe Val  
 35 40 45  
 Val Asp Glu Tyr Gln Asp Val Ser Pro Leu Gln His Arg Leu Leu Glu  
 50 55 60  
 Leu Trp Phe Gly Asp Arg Asn Asp Val Cys Val Val Gly Asp Pro His  
 65 70 75 80  
 Gln Ala Ile His Ser Tyr Ala Gly Ala Arg Ala Asp Tyr Leu Leu Asp  
 85 90 95  
 Phe Val Ala Asp His Pro Gly Ala Lys Arg Ile Asp Leu Val Arg Asn  
 100 105 110  
 Tyr Arg Ser Thr Pro Glu Ile Val Gln Leu Ala Asn Glu Val Leu Val  
 115 120 125  
 Asn Arg Met Thr Pro Glu Glu Ala Leu Glu His Gly Arg Gly Val Thr  
 130 135 140  
 Leu Val Ser Arg Gly Arg Ser Gly Pro Glu Pro Ile Tyr Gln Ala Leu  
 145 150 155 160  
 Gly Asp Asp Ala Ser Glu Ala  
 165

&lt;210&gt; 587

&lt;211&gt; 746

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 587

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 60  
 gagctgtgcg aggtggacga ggacgagtgt gcatcgagcc cctgccagca tgggggcccga  
 120  
 tgcttcgagc gctctgaccc ggccctctac ggggggtgtcc aggccgcctt ccctggcgcc  
 180  
 ttcagcttcc gccatgctgc gggtttctctg tgccactgcc ctcttggett tgagggagcc  
 240  
 gactgcggtg tggaggtgga cgagtgtgcc tcacggccat gcctcaatgg aggccactgc  
 300  
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 360  
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 420  
 actgtggcag gctatatctg caggtgccca gagacctggg gtgggcccga ctgttctgtg  
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 600  
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746

<210> 588  
<211> 248  
<212> PRT  
<213> Homo sapiens

<400> 588  
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20 25 30  
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35 40 45  
Leu Tyr Gly Gly Val Gln Ala Ala Phe Pro Gly Ala Phe Ser Phe Arg  
50 55 60  
His Ala Ala Gly Phe Leu Cys His Cys Pro Pro Gly Phe Glu Gly Ala  
65 70 75 80  
Asp Cys Gly Val Glu Val Asp Glu Cys Ala Ser Arg Pro Cys Leu Asn  
85 90 95  
Gly Gly His Cys Gln Asp Leu Pro Asn Gly Phe Gln Cys His Cys Pro  
100 105 110  
Asp Gly Tyr Ala Gly Pro Thr Cys Glu Glu Asp Val Asp Glu Cys Leu  
115 120 125  
Ser Asp Pro Cys Leu His Gly Gly Thr Cys Ser Asp Thr Val Ala Gly  
130 135 140  
Tyr Ile Cys Arg Cys Pro Glu Thr Trp Gly Gly Arg Asp Cys Ser Val  
145 150 155 160  
Gln Leu Thr Gly Cys Gln Gly His Thr Cys Pro Leu Ala Ala Thr Cys  
165 170 175  
Ile Pro Ile Phe Glu Ser Gly Val His Ser Tyr Val Cys His Cys Pro  
180 185 190  
Pro Gly Thr His Gly Pro Phe Cys Gly Gln Asn Thr Thr Phe Ser Val  
195 200 205  
Met Ala Gly Ser Pro Ile Gln Ala Ser Val Pro Ala Gly Gly Pro Leu  
210 215 220  
Gly Leu Ala Leu Arg Phe Arg Thr Thr Leu Pro Ala Gly Thr Leu Ala  
225 230 235 240  
Thr Arg Asn Asp Thr Lys Glu Ser  
245

<210> 589  
<211> 381  
<212> DNA  
<213> Homo sapiens

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120  
gtgggttggtg taacttcagc tttaggtcag cagccttcca tttccagttt gggtcaaccc  
180

cagctaccat attctcaggc ggctcctcca gtgcaaactc cccttcacagg ggcaccacca  
 240  
 cccaacagt tacagtatgg acaacagcaa ccaatgggtt ctacacagat ggccccaggc  
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 catgtcaaat cagtgactca aaatcctgct tcagagtatg tacaacagca gccaatctt  
 360  
 caaacagcaa tgcctccgg a  
 381

<210> 590  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 590  
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 Gln Gly Leu Gln Pro Val Pro Leu Gln Ala Thr Met Ser Ala Ala Thr  
 20 25 30  
 Gly Ile Gln Pro Ser Pro Val Asn Val Val Gly Val Thr Ser Ala Leu  
 35 40 45  
 Gly Gln Gln Pro Ser Ile Ser Ser Leu Ala Gln Pro Gln Leu Pro Tyr  
 50 55 60  
 Ser Gln Ala Ala Pro Pro Val Gln Thr Pro Leu Pro Gly Ala Pro Pro  
 65 70 75 80  
 Pro Gln Gln Leu Gln Tyr Gly Gln Gln Gln Pro Met Val Ser Thr Gln  
 85 90 95  
 Met Ala Pro Gly His Val Lys Ser Val Thr Gln Asn Pro Ala Ser Glu  
 100 105 110  
 Tyr Val Gln Gln Gln Pro Ile Leu Gln Thr Ala Met Ser Ser Gly  
 115 120 125

<210> 591  
 <211> 684  
 <212> DNA  
 <213> Homo sapiens

<400> 591  
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 120  
 cgcgattcga ttcgggtcct cttccacgtc caggggcccgg gggaaaaatc cgtatcgaaa  
 180  
 naaaaagcgc gcctgcgta ggaagccgaa gccctggccc agcgcatgca gttcgagcac  
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 gctgaagccc caggcctgga cgcgccgga atcctcgggtg aagaagtcga tgcgcctg  
 300  
 gccaccgcgc cggtagcga cgagcagaag ctgggcccgt acgaactgtg ctactgcggt  
 360  
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 420  
 aaatacctgc gccgcgaccg gcattagccg tcgcccgtt tttccatttg aaacactgcc  
 480

cttgtgacgg cagtgcagat atcacattaa aaggagggca ttcattgggtg ttggttctgg  
 540  
 gtccttggcc tacgttgacac ccggttgccg gttttgaact cggatcgcc tcggccggta  
 600  
 tcaagcgccc tgggcgcaag gatgtggtgg cgatgcgctg cgccgaaggt tccacggtgg  
 660  
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 684

<210> 592

<211> 133

<212> PRT

<213> Homo sapiens

<400> 592

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Gln	Lys	Asn	Pro	Lys	Gln	Glu	Tyr	Lys	Arg	Glu	Ser	Phe	Thr	Leu	Phe
			20					25					30		
Ser	Glu	Leu	Leu	Asp	Ser	Ile	Lys	Arg	Asp	Ser	Ile	Arg	Val	Leu	Phe
		35					40					45			
His	Val	Gln	Gly	Pro	Gly	Glu	Lys	Ser	Val	Ser	Lys	Xaa	Lys	Ala	Arg
		50				55					60				
Leu	Arg	Gln	Glu	Ala	Glu	Ala	Leu	Ala	Gln	Arg	Met	Gln	Phe	Glu	His
65					70				75					80	
Ala	Glu	Ala	Pro	Gly	Leu	Asp	Ala	Pro	Glu	Ile	Leu	Gly	Glu	Glu	Val
				85					90					95	
Asp	Val	Ala	Leu	Ala	Thr	Ala	Pro	Val	Arg	Asn	Glu	Gln	Lys	Leu	Gly
			100					105					110		
Arg	Asn	Glu	Leu	Cys	Tyr	Cys	Gly	Ser	Gly	Lys	Lys	Tyr	Lys	His	Cys
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His	Gly	Gln	Ile	Ser											
			130												

<210> 593

<211> 615

<212> DNA

<213> Homo sapiens

<400> 593

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 120  
 gataccatcc ccgcgccgct aggccagcca cgatggtcga cggccaccat ccagacccca  
 180  
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 ccgtttggca tggcccgcga tcacaccgat ctcggtcagg ttgccgaagt cattgtcacg  
 300  
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 360  
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 420

accggagact cgggtgcgacg cattcactgg cgctccaccg ctcaccgcgg ggacctcatg  
 480  
 gtccgatgcg aggagcaggc ctggaaccca tccgtcgtca tcgtgttgga ttctcgggct  
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 615

<210> 594

<211> 205

<212> PRT

<213> Homo sapiens

<400> 594

Xaa	Arg	Val	Gln	Thr	Ala	Arg	Ser	Leu	Ala	Pro	Val	Arg	Ile	Ala	Leu
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Gly	Ser	Gln	Thr	Cys	Glu	Thr	Val	Thr	Val	Glu	Arg	Arg	Gly	Gly	Leu
			20					25					30		
Pro	Leu	Arg	Ala	Ala	Arg	Phe	Thr	Asp	Thr	Ile	Pro	Ala	Pro	Leu	Gly
		35					40					45			
Gln	Pro	Arg	Trp	Ser	Thr	Ala	Thr	Ile	Gln	Thr	Pro	Val	Ile	Pro	Thr
		50				55					60				
Thr	Arg	Gly	Arg	Phe	Val	Ile	Gly	Pro	Val	Met	Met	Arg	Thr	Ile	Asp
65					70					75				80	
Pro	Phe	Gly	Met	Ala	Arg	His	His	Thr	Asp	Leu	Gly	Gln	Val	Ala	Glu
				85					90					95	
Val	Ile	Val	Thr	Pro	Arg	Ile	Val	Asp	Leu	Gly	Ala	Ser	Gly	Glu	Leu
			100					105					110		
Gly	Gly	Gln	Gly	Phe	Asp	Thr	Arg	Ser	Ser	Ala	Ile	His	Ala	Gly	Arg
		115					120					125			
Arg	Gly	Pro	Asp	Asp	Ala	Met	Val	Arg	Asp	Trp	His	Thr	Gly	Asp	Ser
		130				135					140				
Val	Arg	Arg	Ile	His	Trp	Arg	Ser	Thr	Ala	His	Arg	Gly	Asp	Leu	Met
				145		150				155				160	
Val	Arg	Cys	Glu	Glu	Gln	Ala	Trp	Asn	Pro	Ser	Val	Val	Ile	Val	Leu
				165				170					175		
Asp	Ser	Arg	Ala	Arg	Arg	His	Ala	Gly	Thr	Gly	Pro	Asp	Ala	Ser	Phe
			180					185				190			
Glu	Trp	Ala	Val	Asn	Ala	Val	Ala	Ser	Ile	Ser	Thr	Arg			
		195					200					205			

<210> 595

<211> 303

<212> DNA

<213> Homo sapiens

<400> 595

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 gcctgtgccc gcaaccgccc cgaaattctc tccttggcac cgtgtccgct ttacggagcc  
 180



cggagcaagg ctcagaaaaa tgtcccagcc aaaaacatgg tacatgcctg tcatcaggca  
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 agtcttcaaa gagcggctgg gaccaggggc cgaggacac cgttttagagg cggcttaggg  
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 303

<210> 596  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 596  
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 20 25 30  
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 35 40 45  
 Ser Ala Leu Arg Ser Pro Glu Gln Gly Ser Glu Lys Cys Pro Ser Gln  
 50 55 60  
 Lys His Gly Thr Cys Leu Ser Ser Gly Lys Ser Ser Lys Ser Gly Trp  
 65 70 75 80  
 Asp Gln Gly Pro Arg Asp Leu Val  
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<210> 597  
 <211> 2709  
 <212> DNA  
 <213> Homo sapiens

<400> 597  
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 aagaaccaca tgggtggagaa gacctacgaa tgtaaagaat gcgggaaatc ctttggcgat  
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 180  
 cagtgcggga agaccttccg aaaccagtcc atccttaaga ctcacatgaa ctctcacact  
 240  
 ggagagaaac catacgggtg cgatctctgc gggaaagctt tcagcgcgag ttcaaaccctc  
 300  
 accgcacaca ggaagataca cagcaagag agacgctacg aatgcgccgc ctgcgggaaa  
 360  
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 420  
 gttgagtgtg ggcattgtgg caaggccttc aggaaccagt caacgctgaa gacgcacatg  
 480  
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 540  
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 660

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720  
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tgagctcgca ccttactggg tgcaaaagaa tccacggaac ttgggagaag tccagttcct  
840  
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acacaggaag acttaatggc agcttggcat ttaatgtcaa aatccaagcc gtggcattta  
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1560  
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1620  
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1680  
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1740  
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1800  
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1860  
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1980  
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2220  
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2280

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<210> 598

<211> 240

<212> PRT

<213> Homo sapiens

<400> 598

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			20					25					30		
Glu	Cys	Gly	Lys	Ser	Phe	Gly	Asp	Leu	Val	Ser	Arg	Arg	Lys	His	Met
		35					40					45			
Arg	Ile	His	Ile	Val	Lys	Lys	Pro	Val	Glu	Cys	Arg	Gln	Cys	Gly	Lys
		50				55					60				
Thr	Phe	Arg	Asn	Gln	Ser	Ile	Leu	Lys	Thr	His	Met	Asn	Ser	His	Thr
65					70					75				80	
Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Asp	Leu	Cys	Gly	Lys	Ala	Phe	Ser	Ala
				85					90					95	
Ser	Ser	Asn	Leu	Thr	Ala	His	Arg	Lys	Ile	His	Thr	Gln	Glu	Arg	Arg
			100					105					110		
Tyr	Glu	Cys	Ala	Ala	Cys	Gly	Lys	Val	Phe	Gly	Asp	Tyr	Leu	Ser	Arg
		115					120					125			
Arg	Arg	His	Met	Ser	Val	His	Leu	Val	Lys	Lys	Arg	Val	Glu	Cys	Arg
		130				135					140				
His	Cys	Gly	Lys	Ala	Phe	Arg	Asn	Gln	Ser	Thr	Leu	Lys	Thr	His	Met
145					150					155				160	
Arg	Ser	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asp	His	Cys	Gly	Lys
			165						170					175	
Ala	Phe	Ser	Ile	Gly	Ser	Asn	Leu	Asn	Val	His	Arg	Arg	Ile	His	Thr
			180				185						190		
Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Leu	Val	Cys	Gly	Lys	Ala	Phe	Ser	Asp
		195					200					205			
His	Ser	Ser	Leu	Arg	Ser	His	Val	Lys	Thr	His	Arg	Gly	Glu	Lys	Leu
		210				215					220				
Phe	Xaa	Cys	His	Pro	Cys	Gly	Lys	Gly	Ser	Ser	Glu	Arg	Ala	Xaa	Leu
225					230					235					240

<210> 599  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

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 caggcatggt tgccggggccg catcccttgc acttgcaagtc cgtggcctat cggccgagggc  
 180  
 gcaggcctgc agttggagcc gtgcgtgggt gtcccgcgcg aggagcgtgt tggcagacta  
 240  
 tggggctcgt cggaggacga ggatgtgagt ggcgatggct ttgcgcgact gggcgtattc  
 300  
 caccggcgca tgggtgctcca gatcgtccag ggcgatgatca  
 340

<210> 600  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 600  
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 Arg Ala Lys Pro Ser Pro Leu Thr Ser Ser Ser Ser Asp Glu Pro His  
 20 25 30  
 Ser Leu Pro Thr Arg Ser Ser Arg Gly Thr Pro Thr His Gly Ser Asn  
 35 40 45  
 Cys Arg Pro Ala Pro Arg Pro Ile Gly His Gly Leu Gln Val Gln Gly  
 50 55 60  
 Met Arg Pro Gly Lys His Ala Trp Ala Lys Arg Cys Arg Leu Arg Cys  
 65 70 75 80  
 Thr Ala Thr Pro Ser Thr Cys Ala Met Thr Pro Asn Lys Arg Ser Asp  
 85 90 95  
 Thr Thr Glu Arg Ser His His Asp Val Lys Ser Arg Glu Ala Arg  
 100 105 110

<210> 601  
 <211> 421  
 <212> DNA  
 <213> Homo sapiens

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 ccgcgctcca ccattttgat ggacggcgtc ccgctggcgg tcgcgcctta cggccagccg  
 120  
 cagctgtcga tggccccgct gtctatcggg aatctgcaat cgggtggacgt ggtgcgcggc  
 180  
 ggcggcgcgg tgcgctacgg gccgcagaac gtcggcggcg tgatcaactt cgttaccgca  
 240

gacattccca aaacgtttgg cggtgccgcc agcgtacaaa cccaggggtgc cagccacggc  
 300  
 ggcctgaaga ccctgaccag cgcctccgtg ggcggcaccg cagacaacgg cctcggcgcc  
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 420  
 n  
 421

<210> 602  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 602  
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 Ser Arg Leu Ser Pro Arg Ser Thr Ile Leu Met Asp Gly Val Pro Leu  
 20 25 30  
 Ala Val Ala Pro Tyr Gly Gln Pro Gln Leu Ser Met Ala Pro Leu Ser  
 35 40 45  
 Ile Gly Asn Leu Gln Ser Val Asp Val Val Arg Gly Gly Gly Ala Val  
 50 55 60  
 Arg Tyr Gly Pro Gln Asn Val Gly Gly Val Ile Asn Phe Val Thr Arg  
 65 70 75 80  
 Asp Ile Pro Lys Thr Phe Gly Gly Ala Ala Ser Val Gln Thr Gln Gly  
 85 90 95  
 Ala Ser His Gly Gly Leu Lys Thr Leu Thr Ser Ala Ser Val Gly Gly  
 100 105 110  
 Thr Ala Asp Asn Gly Leu Gly Ala Glu Leu Leu Tyr Ser Gly Leu His  
 115 120 125  
 Gly Gln Gly Tyr Arg Asp Asn Asn Asp Asn Thr Asp  
 130 135 140

<210> 603  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 603  
 nagggcggca tgcacgaaag cttgcgcaaa cgctcgctgg aaggcttgga caagatcggc  
 60  
 ttcgacggcc tggccatcgg cggtctgtcg gtgggcgagc ccaagcacga gatgatcaag  
 120  
 gtgctggatt acctgccggg cctgatgccg gctgacaaac ctcgttacct tatgggcgtt  
 180  
 ggcaaaccgg aagacctcgt agaggggtgtg cgccgcgggtg tggacatggt cgattgcgtg  
 240  
 atgccaaccc gtaatgcccc caatgggcat ctgttcacg atacaggcgt gctgaagatc  
 300  
 cgtaacgag  
 309

<210> 604

<211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 604

```

Xaa Gly Gly Met His Glu Ser Leu Arg Lys Arg Ser Leu Glu Gly Leu
 1           5           10           15
Asp Lys Ile Gly Phe Asp Gly Leu Ala Ile Gly Gly Leu Ser Val Gly
      20           25           30
Glu Pro Lys His Glu Met Ile Lys Val Leu Asp Tyr Leu Pro Gly Leu
      35           40           45
Met Pro Ala Asp Lys Pro Arg Tyr Leu Met Gly Val Gly Lys Pro Glu
      50           55           60
Asp Leu Val Glu Gly Val Arg Arg Gly Val Asp Met Phe Asp Cys Val
65           70           75           80
Met Pro Thr Arg Asn Ala Arg Asn Gly His Leu Phe Ile Asp Thr Gly
      85           90           95
Val Leu Lys Ile Arg Asn Ala
      100

```

<210> 605  
 <211> 428  
 <212> DNA  
 <213> Homo sapiens

<400> 605

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acgcgttcac gatagggtag ttgcctatatt caacgcggtc ggtattttcc tgcacaacaa
60
actggcccaa ggctgggcta tagtcagggtg catagtactt ggtgaagtag cgtacgtccg
120
caccacatc acatttcagt accttggtcta tcttcaatcg gaaaaaaga ttggagtaaa
180
tggtgagttt tggtaatggc aacgccgttt gactggaaga gttttggaag gtaatgaccg
240
attcccagtg caaagggtccc catgctacat cctgcgacaa tgaggccgtt agcacgttta
300
ttgcctcgct gctttgccga acgccaacct ctgtaccgat acgctgatac tgattgttga
360
tggtatagtc ttgcgccagg taggtataat tgggtcaattc gtccatggca atgcgcagtg
420
aagtcttg
428

```

<210> 606  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 606

```

Met Asp Glu Leu Thr Asn Tyr Thr Tyr Leu Ala Gln Ala Tyr Thr Ile
 1           5           10           15
Asn Asn Gln Tyr Gln Arg Ile Gly Thr Glu Val Gly Val Arg Gln Ser
      20           25           30
Ser Glu Ala Ile Asn Val Leu Thr Ala Ser Leu Ser Gln Asp Val Ala

```

```

      35              40              45
Trp Gly Pro Leu His Trp Glu Ser Val Ile Thr Phe Gln Asn Ser Ser
  50              55              60
Ser Gln Thr Ala Leu Pro Leu Pro Lys Leu Asn Ile Tyr Ser Asn Leu
  65              70              75              80
Phe Phe Arg Leu Lys Ile Ala Lys Val Leu Lys Cys Asp Val Gly Ala
      85              90              95
Asp Val Arg Tyr Phe Thr Lys Tyr Tyr Ala Pro Asp Tyr Ser Pro Ala
      100              105              110
Leu Gly Gln Phe Val Val Gln Glu Asn Thr Asp Arg Val Glu Ile Gly
      115              120              125
Asn Tyr Pro Ile Val Asn Ala
      130              135

```

&lt;210&gt; 607

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 607

```

gatcacgatg aattgtgggc gtacacgtac gagaatgtga tggcgctaaa cttgccgcct
60
gacattgtgt gtaaaggatt ctttagaaaa ttggaaaacg tagtgaccgg agtcaatttg
120
gttttcaacg gcaaacatta tcaaattgta aagaaagagg atgacctatt caaattgacc
180
aaaagcaatt gttacaagtt gagcaacata aaatttaaca attggaaata cttgtacttg
240
acaacgcacg gtgtgtacaa cgtgttcacc aacagctttc attcgagctg tccatttttg
300
ttggggacca cgttgccgca gacattcaag aagcccaccg acgaaaagta tttgcccgag
360
gacgcg
366

```

&lt;210&gt; 608

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 608

```

Asp His Asp Glu Leu Trp Ala Tyr Thr Tyr Glu Asn Val Met Ala Leu
  1              5              10              15
Asn Leu Pro Pro Asp Ile Val Cys Lys Gly Phe Phe Arg Lys Leu Glu
      20              25              30
Asn Val Val Thr Gly Val Asn Leu Val Phe Asn Gly Lys His Tyr Gln
      35              40              45
Ile Val Lys Lys Glu Asp Asp Leu Phe Lys Leu Thr Lys Ser Asn Cys
      50              55              60
Tyr Lys Leu Ser Asn Ile Lys Phe Asn Asn Trp Lys Tyr Leu Tyr Leu
  65              70              75              80
Thr Thr His Gly Val Tyr Asn Val Phe Thr Asn Ser Phe His Ser Ser
      85              90              95
Cys Pro Phe Leu Leu Gly Thr Thr Leu Pro Gln Thr Phe Lys Lys Pro

```

100 105 110  
 Thr Asp Glu Lys Tyr Leu Pro Glu Asp Ala  
 115 120

<210> 609  
 <211> 291  
 <212> DNA  
 <213> Homo sapiens

<400> 609  
 nacgcgttat gacacggcct cctccaaggt cagtgtcatc gagtcacgta actcgtcggt  
 60  
 tgggtcgggtt ggaacgagtc cgtcatgagc ccggtcgcca tggacgactc cagcagtcgg  
 120  
 taccagcctt ggaagcagga ccccccacgcg acggaatcgc cggcttccaa gtcgtcgccc  
 180  
 ccgaagcctc aaacttcccc cgccccgtac gccgggcccgg ctccgaagac accggccaca  
 240  
 cctggaccat ctggggcggg ggcgccgccg tggtggtggc ggggtggagcc g  
 291

<210> 610  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<400> 610  
 Met Ser Pro Val Ala Met Asp Asp Ser Ser Ser Pro Tyr Pro Ala Trp  
 1 5 10 15  
 Lys Gln Asp Pro His Ala Thr Glu Ser Pro Ala Ser Lys Ser Ser Pro  
 20 25 30  
 Pro Lys Pro Gln Thr Ser Pro Ala Pro Tyr Ala Gly Pro Ala Pro Lys  
 35 40 45  
 Thr Pro Ala Thr Pro Gly Pro Ser Gly Ala Gly Ala Pro Pro Trp Trp  
 50 55 60  
 Trp Arg Val Glu Pro  
 65

<210> 611  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 611  
 nnnatcttgt gtcgattttc ggtcgcatat actatggggg agtattgtat aatgcggcgg  
 60  
 tgtacccaag tagagaggtg ttcgatgccca cacagtcggg aagaaaagaa gcaagcactg  
 120  
 acgcgcatca ggcgcatcaa aggtcaggta gcgactcttg agcaagcgct tgatgcagggt  
 180  
 gcgaaatgtc ctgcaattct tcagcagctt gcggccgttc gtggcgagct caacggattg  
 240  
 atggcaacgg ttctggagag ctatctgcgg gaagagtttc ccagtagcga aatcaggagc  
 300



gattcgcaga acaagtccat tgacgagacc atctctatcg tccgctccta tctgcggttag  
 360  
 aggcaccagg gtgtcctcgg tgagggcaaa ttt  
 393

<210> 612  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 612  
 Xaa Ile Leu Cys Arg Phe Ser Val Ala Tyr Thr Met Gly Glu Tyr Cys  
 1 5 10 15  
 Ile Met Arg Arg Cys Thr Gln Val Glu Arg Cys Ser Met Pro His Ser  
 20 25 30  
 Pro Glu Glu Lys Lys Gln Ala Leu Thr Arg Ile Arg Arg Ile Lys Gly  
 35 40 45  
 Gln Val Ala Thr Leu Glu Gln Ala Leu Asp Ala Gly Ala Lys Cys Pro  
 50 55 60  
 Ala Ile Leu Gln Gln Leu Ala Ala Val Arg Gly Ala Val Asn Gly Leu  
 65 70 75 80  
 Met Ala Thr Val Leu Glu Ser Tyr Leu Arg Glu Glu Phe Pro Ser Ser  
 85 90 95  
 Glu Ile Arg Ser Asp Ser Gln Asn Lys Ser Ile Asp Glu Thr Ile Ser  
 100 105 110  
 Ile Val Arg Ser Tyr Leu Arg  
 115

<210> 613  
 <211> 567  
 <212> DNA  
 <213> Homo sapiens

<400> 613  
 gaaaatgctc ctggcgccctc aggggaaggctc cttctcaaag aaaaggatgg ggctgaatcg  
 60  
 ctggaaacgg ttcacaagga agccgagtc caagcctact tttggtoctg acagtgtgga  
 120  
 acactggata aagagagtgg agaaagcctc agagtttgca gtgtcaaata cattttttac  
 180  
 tagaaattca gatttaccta gaagtccttg gggccaaatc acagatttga aaacatctga  
 240  
 gcaaatagag gatcatgatg aaatctatgc agaagctcag gagctgggtca atgactgggt  
 300  
 agacacccaaa cttagcaag aattagcaag tgaggaagaa ggtgatgcta aaaacactgt  
 360  
 gtcaagtgtc actattatgc cggaagccaa tggccatttg aaatatgaca agtttgatga  
 420  
 tttatgtggc tatttgagg aagaagagga aagtaccacc gttcaaaaat ttatagacca  
 480  
 tctgctccat aaaaatgtgg tagattctgc aatgatggaa gatcttggaa ggaaggaaaa  
 540  
 ccaagacaag aagcagcaga aggatcc  
 567

<210> 614  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 614  
 Met Leu Leu Ala Pro Gln Gly Arg Ser Phe Ser Lys Lys Arg Met Gly  
 1 5 10 15  
 Leu Asn Arg Trp Lys Arg Phe Thr Arg Lys Pro Ser Pro Lys Pro Thr  
 20 25 30  
 Phe Gly Pro Asp Ser Val Glu His Trp Ile Lys Arg Val Glu Lys Ala  
 35 40 45  
 Ser Glu Phe Ala Val Ser Asn Ala Phe Phe Thr Arg Asn Ser Asp Leu  
 50 55 60  
 Pro Arg Ser Pro Trp Gly Gln Ile Thr Asp Leu Lys Thr Ser Glu Gln  
 65 70 75 80  
 Ile Glu Asp His Asp Glu Ile Tyr Ala Glu Ala Gln Glu Leu Val Asn  
 85 90 95  
 Asp Trp Leu Asp Thr Lys Leu Lys Gln Glu Leu Ala Ser Glu Glu Glu  
 100 105 110  
 Gly Asp Ala Lys Asn Thr Val Ser Ser Val Thr Ile Met Pro Glu Ala  
 115 120 125  
 Asn Gly His Leu Lys Tyr Asp Lys Phe Asp Asp Leu Cys Gly Tyr Leu  
 130 135 140  
 Glu Glu Glu Glu Glu Ser Thr Thr Val Gln Lys Phe Ile Asp His Leu  
 145 150 155 160  
 Leu His Lys Asn Val Val Asp Ser Ala Met Met Glu Asp Leu Gly Arg  
 165 170 175  
 Lys Glu Asn Gln Asp Lys Lys Gln Gln Lys Asp  
 180 185

<210> 615  
 <211> 685  
 <212> DNA  
 <213> Homo sapiens

<400> 615  
 nnacgcgtgc tgccctaagt gacggattcc atgtcgggtgc gagtcgggtc ggggccgatg  
 60  
 ggccatgaac gggccctagc gagggccgga ctcgccccg tggccggatg cgacgaggcg  
 120  
 gggcggggcg cgtgtgcagg gccattggta gccgcagctg tcattcttga tgatcgcaga  
 180  
 tccggcagga ttgcggggct agcagattcc aagacactat ctgcggccaa gagagaggcc  
 240  
 ctgtttaacg tcatcatgga taaagctttg gcagtgtcgt gggtagctgt agaagccgac  
 300  
 gaatgcgatc ggttggggat gcaggaggca gatatcagcg gcttgaggcg tgccgtggtg  
 360  
 aggtgggag ttgaaccggg ctacgtgctg tcggacggtt tcccggtcga cggactgacg  
 420  
 gttcccgatc tgggaatgtg gaagggcgat tcagtgtgtg cgtgtgtggc agctgcctcc  
 480

atcgtggcca aagtggccag ggatcgcac atgacgccta tggacgccga gattcctggt  
 540  
 tacgattttg cgggtgcacaa ggggtacgag acagccttac accagcgtcg tctgaaggag  
 600  
 ttaggaccgt ctcgtcagca ccggatgagc tacgccaatg tgcgacgagc ggctaggctt  
 660  
 cattcatcat gagtgccgaa gatct  
 685

<210> 616  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<400> 616  
 Met Ser Val Arg Val Gly Ser Gly Pro Met Gly His Glu Arg Ala Leu  
 1 5 10 15  
 Ala Arg Ala Gly Leu Gly Pro Val Ala Gly Cys Asp Glu Ala Gly Arg  
 20 25 30  
 Gly Ala Cys Ala Gly Pro Leu Val Ala Ala Val Ile Leu Asp Asp  
 35 40 45  
 Arg Arg Ser Gly Arg Ile Ala Gly Leu Ala Asp Ser Lys Thr Leu Ser  
 50 55 60  
 Ala Ala Lys Arg Glu Ala Leu Phe Asn Val Ile Met Asp Lys Ala Leu  
 65 70 75 80  
 Ala Val Ser Trp Val Arg Val Glu Ala Asp Glu Cys Asp Arg Leu Gly  
 85 90 95  
 Met Gln Glu Ala Asp Ile Ser Gly Leu Arg Arg Ala Val Val Arg Leu  
 100 105 110  
 Gly Val Glu Pro Gly Tyr Val Leu Ser Asp Gly Phe Pro Val Asp Gly  
 115 120 125  
 Leu Thr Val Pro Asp Leu Gly Met Trp Lys Gly Asp Ser Val Cys Ala  
 130 135 140  
 Cys Val Ala Ala Ala Ser Ile Val Ala Lys Val Ala Arg Asp Arg Ile  
 145 150 155 160  
 Met Ile Ala Met Asp Ala Glu Ile Pro Gly Tyr Asp Phe Ala Val His  
 165 170 175  
 Lys Gly Tyr Ala Thr Ala Leu His Gln Arg Arg Leu Lys Glu Leu Gly  
 180 185 190  
 Pro Ser Arg Gln His Arg Met Ser Tyr Ala Asn Val Arg Arg Ala Ala  
 195 200 205  
 Arg Leu His Ser Ser  
 210

<210> 617  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

<400> 617  
 nncacctgtt tggctcgggg cactcgcgga tcatggtcga ggaaatgtgg ccgcgctacg  
 60  
 gctcgtttcc cggcttcaac cccatcgtcg agctgtcgtc gtcgttccac aacctcgtcg  
 120

tcggcgccaa cggccagcgc caggccatgt tcctcgaaaa cgtttcgggc cttcccggag  
 180  
 cgaatcctcc gaaacttcga cctgtcccaa caagactctg cactcgtgat ttcataaagc  
 240  
 gctgcaacgt cgtgccaatc gagatggccg aggagttcca gcgtcgcggc gtccgcgtcg  
 300  
 tctcgatcat ctgcgtggcg cactcgcagg cgtcgac  
 337

<210> 618

<211> 112

<212> PRT

<213> Homo sapiens

<400> 618

Xaa	Thr	Cys	Leu	Ala	Arg	Gly	Thr	Arg	Gly	Ser	Trp	Ser	Arg	Lys	Cys
1				5					10					15	
Gly	Arg	Ala	Thr	Ala	Arg	Phe	Pro	Ala	Ser	Thr	Pro	Ser	Ser	Ser	Cys
			20					25					30		
Arg	Cys	Arg	Ser	Thr	Thr	Ser	Ser	Ala	Pro	Thr	Ala	Ser	Ala	Arg	
		35					40					45			
Pro	Cys	Ser	Ser	Lys	Thr	Phe	Pro	Ala	Phe	Pro	Glu	Arg	Ile	Leu	Arg
	50					55				60					
Asn	Phe	Asp	Leu	Ser	Gln	Gln	Asp	Ser	Ala	Leu	Val	Ile	Ser	Ser	Ser
65					70					75				80	
Ala	Ala	Thr	Ser	Cys	Gln	Ser	Arg	Trp	Pro	Arg	Ser	Ser	Ser	Val	Ala
				85					90					95	
Ala	Ser	Ala	Ser	Ser	Arg	Ser	Ser	Arg	Trp	Arg	Thr	Arg	Arg	Arg	Arg
			100					105						110	

<210> 619

<211> 425

<212> DNA

<213> Homo sapiens

<400> 619

acgcgttttt tatgccgatc ttatgctcta acctagaaac aatatcagct acaaacctaa  
 60  
 tagctataag ataatttcg aaagcatcaa taggagtttt gatcatttcc gcataacctaa  
 120  
 gttttatagc atctttgtca gaaggcaaac ctgccaaacc agatgaatcg atgccactct  
 180  
 caaacttgct caaatgttca attaaatcat ccaagtgtg gccatgctta ccgcttccag  
 240  
 attttgaatg aatcattact ttaattgatt tttcaatcgc taaatggaat tcccagcaag  
 300  
 caatagaagc ccgctcattt ttaaagctca gtatgtcact aatgcctttt tcgaagtggc  
 360  
 tccatattcc ctgcgccata ttagaagctg actgggttga atggcttgcc atgttcaa  
 420  
 ctaga  
 425

<210> 620

<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 620  
 Met Ala Ser His Ser Asn Gln Ser Ala Ser Asn Met Ala Gln Gly Ile  
   1                  5                  10                  15  
 Trp Ser His Phe Glu Lys Gly Ile Ser Asp Ile Leu Ser Phe Lys Asn  
                   20                  25                  30  
 Glu Arg Ala Ser Ile Ala Cys Trp Glu Phe His Leu Ala Ile Glu Lys  
                   35                  40                  45  
 Ser Ile Lys Val Met Ile His Ser Lys Ser Gly Ser Gly Lys His Gly  
                   50                  55                  60  
 His Asn Leu Asp Asp Leu Ile Glu His Leu Ser Lys Phe Glu Ser Gly  
   65                  70                  75                  80  
 Ile Asp Ser Ser Gly Leu Ala Gly Leu Pro Ser Asp Lys Asp Ala Ile  
                   85                  90                  95  
 Lys Leu Arg Tyr Ala Glu Met Ile Lys Thr Pro Ile Asp Ala Phe Glu  
                   100                  105                  110  
 Tyr Tyr Leu Ile Ala Ile Arg Phe Val Ala Asp Ile Val Ser Arg Leu  
                   115                  120                  125  
 Glu His Lys Ile Gly Ile Lys Asn Ala  
                   130                  135

<210> 621  
 <211> 453  
 <212> DNA  
 <213> Homo sapiens

<400> 621  
 cccggcaagg gagccatctt gacgaatatg tccttgtggt ggttcgacca attggccgac  
 60  
 atcgctgata accatctcgt gagcgtggat gtccccgccg aggtcgagg gcgcgccatg  
 120  
 gtcgttgagg aactcgacat gttccccggtc gaatgcgtcg tgcgggggcta cctcaccggt  
 180  
 tcagggtggg ccgaatatca gcgcaaccag gccgtgtgcy gaatccgcct tcccgagggg  
 240  
 ctgcagaatg ggtccccggt cgaagagccc attttcacc cggcaattaa ggccccgcag  
 300  
 ggagaacatg acgagaacat cgactatcta cgcttgtag aactcgtcgg tccngatgn  
 360  
 tcagcgcagc tgcctgacct ttcgctgagg gtctaccagc gtgcagagga gatcgctcgg  
 420  
 aagcgaggca tcctcctggc ggataccaag ctt  
 453

<210> 622  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 622  
 Pro Gly Lys Gly Ala Ile Leu Thr Asn Met Ser Leu Trp Trp Phe Asp

```

1           5           10           15
Gln Leu Ala Asp Ile Val Asp Asn His Leu Val Ser Val Asp Val Pro
20           25           30
Ala Glu Val Ala Gly Arg Ala Met Val Val Glu Glu Leu Asp Met Phe
35           40           45
Pro Val Glu Cys Val Val Arg Gly Tyr Leu Thr Gly Ser Gly Trp Ala
50           55           60
Glu Tyr Gln Arg Asn Gln Ala Val Cys Gly Ile Arg Leu Pro Glu Gly
65           70           75           80
Leu Gln Asn Gly Ser Arg Leu Glu Glu Pro Ile Phe Thr Pro Ala Ile
85           90           95
Lys Ala Pro Gln Gly Glu His Asp Glu Asn Ile Asp Tyr Leu Arg Leu
100          105          110
Val Glu Leu Val Gly Pro Xaa Xaa Ser Ala Gln Leu His Asp Leu Ser
115          120          125
Leu Arg Val Tyr Gln Arg Ala Glu Glu Ile Ala Arg Lys Arg Gly Ile
130          135          140
Leu Leu Ala Asp Thr Lys Leu
145          150

```

<210> 623  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

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<400> 623
acgcgtccag tatgtccacg gaggacatgc ttgacctcga ctggaacgtc tcctactacg
60
cgaggaacta tcaggccgcg caatcagttg tggcgaaatt cgacgcgggc accattgccc
120
aagccgaaga cctgccacct gacgacaccc acacgggggc ggaactggta aagagcgtgg
180
tcaacagcat cacctgtgtg tcaccctgtg acatcgaaga tttcaccacc atagagatcc
240
aggggctggg actgcactgt gtcaggctct gggcgcttgg gctgctcgcc ctgtcactgc
300
ccagcgcacc catgcgggca ccccccgct acgccgcata tggcg
345

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<210> 624  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

```

<400> 624
Met Ser Thr Glu Asp Met Leu Asp Leu Asp Ser Asn Val Ser Tyr Tyr
1           5           10           15
Ala Arg Asn Tyr Gln Ala Ala Gln Ser Val Val Ala Lys Phe Asp Ala
20           25           30
Gly Thr Ile Ala Gln Ala Glu Asp Leu Pro Pro Asp Asp Thr His Thr
35           40           45
Gly Ala Glu Leu Val Lys Ser Val Val Asn Ser Ile Thr Cys Val Ser
50           55           60
Pro Leu Tyr Ile Glu Asp Phe Thr Thr Ile Glu Ile Gln Gly Leu Gly

```

```

65          70          75          80
Leu His Cys Val Arg Leu Trp Ala Pro Gly Leu Leu Ala Leu Ser Leu
          85          90          95
Pro Ser Ala Pro Met Arg Ala His Pro Arg Tyr Ala Ala Tyr Gly
          100          105          110

```

<210> 625  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 625  
 ggtacccagc atgatgctgc tagacatttg ctgaatgcat agatgatttt tccagggcct  
 60  
 gtaatttaca gggagagcaa tggaggccca gagacaagat gattcagctc ctccactctg  
 120  
 ttcaggatca tatcctaagg accaacaatgt ctgtctacct ttacactgag cccccaccca  
 180  
 gccaacacc tcccatgaga gacaggctct ccctgctga gcttggaccc aggcccttc  
 240  
 tctgtgagc tcagaacaca tgcttgactg tgatgtaaca ggggtggcagc cccacagca  
 300  
 ttgcatctgc cccatactca gtgtggggag ataggacgc  
 339

<210> 626  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

```

<400> 626
Met Gly Gln Met Gln Cys Cys Gly Gly Cys His Pro Val Thr Ser Gln
 1          5          10          15
Ser Ser Met Cys Ser Glu Leu Ser Arg Glu Gly Ala Trp Val Gln Ala
          20          25          30
Gln Ala Gly Arg Ala Cys Leu Ser Trp Glu Val Val Gly Trp Val Gly
          35          40          45
Ala Gln Cys Lys Gly Arg Gln Thr Cys Trp Ser Leu Gly Tyr Asp Pro
          50          55          60
Glu Gln Ser Gly Gly Ala Glu Ser Ser Cys Leu Trp Ala Ser Ile Ala
65          70          75          80
Leu Pro Val Asn Tyr Arg Pro Trp Lys Asn His Leu Cys Ile Gln Gln
          85          90          95
Met Ser Ser Ser Ile Met Leu Gly Thr
          100          105

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<210> 627  
 <211> 10319  
 <212> DNA  
 <213> Homo sapiens

<400> 627  
 ntctctccgc gaaggctcct ttgatattaa tagtggttggg gtcttgaaac tgacgtaatg  
 60

cgcgagagact gaggtcctga caagcgataa catttctgat aaagaccga tcttactgca  
120  
atctctagcg tcctcttttt tggtgctgct gggttctcca gacctcgct cctctcgatt  
180  
gctctctcgc cttcctatct cttttttttt tttttaaaca aaaaacaaca cccctcccc  
240  
tctccacccc ggcaccgggc acatccttgc tctatttctt ttctctttct ctctctctct  
300  
ctctctctct cttttttaat aagggtgggg gagggaaagg ggggggatgc aggaaagacc  
360  
ttttctctct cccccgcaa taatccaaga tcaactctgc aaacaacaga agacggttca  
420  
tggttttggc cgccgcgcca ccatctttcg ggctgccgag ggtgttcttg acgattaatc  
480  
aacagatgta cagatcagct ctcaaatgt cttctgtgtc ttctgagcgt cttctaagac  
540  
aattgcatta gctcctgct agttgactaa tagaattaat aattgtaaaa agcactctaa  
600  
agccacatgc cttatgaagt caatgctggg tatgatttta caaatatggg ccggaaaaag  
660  
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Val Gly Ser Asp Asn Asp Ile Pro Leu Asp Leu Ala Ile Lys His Ser		1165
	1170	1175
Arg Pro Gly Pro Thr Ala Asn Gly Ala Ser Lys Glu Lys Thr Lys Ala		1180
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Pro Pro Asn Val Lys Asn Glu Gly Pro Leu Asn Val Val Lys Thr Glu		1200
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Lys Val Asp Arg Ser Thr Gln Asp Glu Leu Ser Thr Lys Cys Val His		1215
	1220	1225
Cys Gly Ile Val Phe Leu Asp Glu Val Met Tyr Ala Leu His Met Ser		1230
	1235	1240
Cys His Gly Asp Ser Gly Pro Phe Gln Cys Ser Ile Cys Gln His Leu		1245
	1250	1255
Cys Thr Asp Lys Tyr Asp Phe Thr Thr His Ile Gln Arg Gly Leu His		1260
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Leu Val Ala Trp Gly Lys Leu Ser Gly Lys Val Ala Ser Lys Pro Leu
      35             40             45
Thr Leu Pro Gly Arg Asn Trp Ile Asn Leu Gly Leu Leu Val Val Ile
      50             55             60
Ile Ala Cys Gly Ile Trp Phe Ser Asn Val Ser Gly Gly Ile Ala Trp
65             70             75             80
Leu Pro Leu Ala Leu Leu Thr Leu Ala Ser Leu Phe Leu Gly Phe His
      85             90             95
Phe Val Ala Ala Ile Gly Gly Ala Asp Met Pro Val Val Ile Ser Met
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Leu Asn Ser Tyr Ser Gly Trp Ala Ala Ala Phe Ser Gly Phe Ser Leu
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His Ile Pro Val Leu Ile Val Thr Gly
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Glu Arg Asp Gln Tyr Lys Leu Met Ala Asn Gln Leu Arg Glu Arg His
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Gln Ser Leu Lys Lys Lys Tyr Arg Glu Leu Ile Asp Gly Asp Pro Ser
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 Val Asp Ala Val Val Asn Ala Val Glu His Tyr Ser Glu Leu Thr Pro  
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 Met Gly Xaa Gln Val Val Glu Leu Gly Pro Val Asn Ala Thr Ile His  
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 245 250 255  
 Ser Ala Thr Ser Ser Ser Met Arg Arg Arg Arg His Ala Phe Arg Arg  
 260 265 270  
 Gln Ala Ser Ser Thr Phe Ser Tyr Tyr Gly Lys Leu Gly Ser His Cys  
 275 280 285  
 Tyr Arg Tyr Arg Arg Ala Asn Ala Val Val Leu Ile Lys Pro Ser Arg



290 295 300  
 Ser Met Ser Asp Leu Tyr Asp Met Gln Lys Arg Gln Arg Gln His Arg  
 305 310 315 320  
 His Arg Asn Gln Ser Gly Ala Thr Thr Ser Ser Gly Asp Thr Glu Ser  
 325 330 335  
 Glu Glu Gly Glu Gly Glu Thr Thr Val Arg Leu Leu Trp Leu Ser Met  
 340 345 350  
 Leu Lys Met Pro Arg Glu Leu Met Arg Leu Cys Leu Cys His Leu Leu  
 355 360 365  
 Thr Trp Phe Ser Val Ile Ala Glu Ala Val Phe Tyr Thr Asp Phe Met  
 370 375 380  
 Gly Gln Val Ile Phe Glu Gly Asp Pro Lys Ala Pro Ser Asn Ser Thr  
 385 390 395 400  
 Ala Trp Gln Ala Tyr Asn Ala Gly Val Lys Met Gly Cys Trp Gly Leu  
 405 410 415  
 Val Ile Tyr Ala Ala Thr Gly Ala Ile Cys Ser Ala Leu Leu Gln Lys  
 420 425 430  
 Tyr Leu Asp Asn Tyr Asp Leu Ser Val Arg Val Ile Tyr Val Leu Gly  
 435 440 445  
 Thr Leu Gly Phe Ser Val Gly Thr Ala Val Met Ala Met Phe Pro Asn  
 450 455 460  
 Val Tyr Val Ala Met Val Thr Ile Ser Thr Met Gly Ile Val Ser Met  
 465 470 475 480  
 Ser Ile Ser Tyr Cys Pro Tyr Ala Leu Leu Gly Gln Tyr His Asp Ile  
 485 490 495  
 Lys Gln Tyr Ile His His Ser Pro Gly Asn Ser Lys Arg Gly Phe Gly  
 500 505 510  
 Ile Asp Cys Ala Ile Leu Ser Cys Gln Val Tyr Ile Ser Gln Ile Leu  
 515 520 525  
 Val Ala Ser Ala Leu Gly Gly Val Val Asp Ala Val Gly Thr Val Arg  
 530 535 540  
 Val Ile Pro Met Val Ala Ser Val Gly Ser Phe Leu Gly Phe Leu Thr  
 545 550 555 560  
 Ala Thr Phe Leu Val Ile Tyr Pro Asp Val Ser Glu Glu Ala Lys Glu  
 565 570 575  
 Glu Gln Lys Gly Leu Ser Ser Pro Leu Ala Gly Glu Gly Arg Ala Gly  
 580 585 590  
 Gly Asn Ser Glu Lys Pro Thr Val Leu Lys Leu Thr Arg Lys Glu Gly  
 595 600 605  
 Leu Gln Gly Pro Val Glu Thr Glu Ser Val Val  
 610 615

&lt;210&gt; 637

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 637

ngaaaaacag gatgaatccc gtatcattct taagcccgaa aagtactgaa tgcgtcttc  
 60

tctcgatcgg tgatgatctg gaaaggaaaa atcatcgtga ctactacatc acccgctact  
 120

acgcaaagac cgtcagttgg caggaaagtt ggttcctggc cccttaatcc atggtgtttt  
 180

tgtaggccct tattatTTTT cggaatgggt cggtttattg cgattccagt attcctcact  
 240  
 gtgccgaata tcattaatat cggaatccaa gccgcggtgg tggcgattat ggccttcggt  
 300  
 atgaccttcg tcacggttac ctccggcatt gatttgtctg tgggttcggt cgcagctctt  
 360  
 tcagccatgg  
 370

<210> 638  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 638  
 Met Ile Trp Lys Gly Lys Ile Ile Val Thr Thr Thr Ser Pro Ala Thr  
 1 5 10 15  
 Thr Gln Arg Pro Ser Val Gly Arg Lys Val Gly Ser Trp Ser Leu Asn  
 20 25 30  
 Pro Trp Cys Phe Cys Arg Pro Leu Phe Phe Gly Met Val Arg Phe  
 35 40 45  
 Ile Ala Ile Pro Val Phe Leu Thr Val Pro Asn Ile Ile Asn Ile Gly  
 50 55 60  
 Ile Gln Ala Ala Val Val Ala Ile Met Ala Phe Gly Met Thr Phe Val  
 65 70 75 80  
 Ile Val Thr Ser Gly Ile Asp Leu Ser Val Gly Ser Val Ala Ala Leu  
 85 90 95  
 Ser Ala Met

<210> 639  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 639  
 nacgcgtcga tgggcaacta catcttcagt cgggatgccc tggtcgaggc actcttcgca  
 60  
 gactcccagt ccgctgagtc gcgtcatgac atgggtggcg acatcatccc gagattcgtc  
 120  
 gaggccgggg acgcgcaggt ctacgacttc tgtgacaacc aggtgcccgg aaccaccgag  
 180  
 aaggatcggg actactggcg ggacgtggga actatcgatg cctaccacga cgcgcacatg  
 240  
 gacctcgtgt cgggtggaacc ggagttcaac ctctacaacc ccgactggcc gatctggagc  
 300  
 atccaggaac aggcaccggg agcgaaattt  
 330

<210> 640  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 640

```

Xaa Ala Ser Met Gly Asn Tyr Ile Phe Ser Arg Asp Ala Leu Val Glu
 1           5           10           15
Ala Leu Phe Ala Asp Ser Gln Ser Ala Glu Ser Arg His Asp Met Gly
          20           25           30
Gly Asp Ile Ile Pro Arg Phe Val Glu Ala Gly Asp Ala Gln Val Tyr
          35           40           45
Asp Phe Cys Asp Asn Gln Val Pro Gly Thr Thr Glu Lys Asp Arg Asp
          50           55           60
Tyr Trp Arg Asp Val Gly Thr Ile Asp Ala Tyr His Asp Ala His Met
65           70           75           80
Asp Leu Val Ser Val Glu Pro Glu Phe Asn Leu Tyr Asn Pro Asp Trp
          85           90           95
Pro Ile Trp Ser Ile Gln Glu Gln Ala Pro Gly Ala Lys Phe
          100           105           110

```

&lt;210&gt; 641

&lt;211&gt; 491

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 641

```

cgcggtgaccg ggcgggagaa cgtgcgcaag atcctcatgg gcgagcacca cctcgtgagc
60
accgagtggc ctcgcagcac ccgcatgttg ctggggcccca acacggtgtc caattccatt
120
ggcgacatcc accgcaacaa gcgcaaggtc ttctccaaga tcttcagcca cgaggccctg
180
gagagttacc tgcccaagat ccagctggtg atccaggaca cactgcgcgc ctggagcagc
240
caccgaggg ccatcaacgt gtaccaggag gcgcagaagc tgaccttcg catggccatc
300
cgggtgctgc tgggcttcag catccctgag gaggaccttg ggcacctctt tgaggtctac
360
cagcagtttg tggacaatgt cttctccctg cctgtcgacc tgcccttcag tggctaccgg
420
cggggcattc aggtcggca gatcctgcag aaggggctgg agaaggccat ccgggagaag
480
ctgcagtgc c
491

```

&lt;210&gt; 642

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 642

```

Arg Val Thr Gly Ala Glu Asn Val Arg Lys Ile Leu Met Gly Glu His
 1           5           10           15
His Leu Val Ser Thr Glu Trp Pro Arg Ser Thr Arg Met Leu Leu Gly
          20           25           30
Pro Asn Thr Val Ser Asn Ser Ile Gly Asp Ile His Arg Asn Lys Arg
          35           40           45
Lys Val Phe Ser Lys Ile Phe Ser His Glu Ala Leu Glu Ser Tyr Leu

```

50	55	60
Pro Lys Ile Gln Leu Val	Ile Gln Asp Thr Leu Arg Ala Trp Ser Ser	
65	70	75
His Pro Glu Ala Ile Asn Val Tyr Gln Glu Ala Gln Lys Leu Thr Phe		80
	85	90
Arg Met Ala Ile Arg Val Leu Leu Gly Phe Ser Ile Pro Glu Glu Asp		95
	100	105
Leu Gly His Leu Phe Glu Val Tyr Gln Gln Phe Val Asp Asn Val Phe		110
	115	120
Ser Leu Pro Val Asp Leu Pro Phe Ser Gly Tyr Arg Arg Gly Ile Gln		125
	130	135
Ala Arg Gln Ile Leu Gln Lys Gly Leu Glu Lys Ala Ile Arg Glu Lys		140
145	150	155
Leu Gln Cys		160

<210> 643  
 <211> 628  
 <212> DNA  
 <213> Homo sapiens

<400> 643  
 nagatctttg acatctacgt ggtcacctgc gactacctgc ccctaggggc tgagcaggat  
 60  
 gccatcacgc tgcgggaagg ccagtatgtg gaggtcctgg atgcagccca cccactgcgc  
 120  
 tggcttgtcc gcaccaagcc caccaagtcc agcccctcac ggcagggctg ggtgtcacca  
 180  
 gcctacctgg acaggaggct caagctgtca cctgagtggg gggccgctga ggcccctgag  
 240  
 ttccctgggg aggctgtgtc tgaagacgaa tacaaggcaa ggctgagctc tgtgatccag  
 300  
 gagctgctga gttctgagca ggccttcctg gaggagctgc agttcctgca gagccaccac  
 360  
 ctgcagcacc tggagcgctg cccccacgtg cccatagctg tggccggcca gaaggcagtc  
 420  
 atcttccgca atgtgcggga catcggccgc ttccacagca gcttctgca ggagttgcag  
 480  
 cagtgcgaca cggacgacga cgtggccatg tgcttcatca agaaccaggc ggcctttgag  
 540  
 cagtacctgg agttcctggt gggacgtgtg caggctgagt cggtggtcgt cagcacggcc  
 600  
 atccaggagt tctacaagaa atacgcgt  
 628

<210> 644  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 644  
 Xaa Ile Phe Asp Ile Tyr Val Val Thr Ala Asp Tyr Leu Pro Leu Gly  
 1 5 10 15  
 Ala Glu Gln Asp Ala Ile Thr Leu Arg Glu Gly Gln Tyr Val Glu Val

[illegible]

```
<210> 645
<211> 417
<212> DNA
<213> Homo sapiens
```

```
<400> 645
atccataggc attgccagag tattcacttc ctgttggagg cacacagggg agaggcctgt
60
gaggggaagg gcatcaatgc agggctgggg tgtgggaagg tctgcagggc tggcaatggg
120
caagctcagg aatgggtgggg gagacagttg gagccacggc agggacaatg gagctcagaa
180
ggtccctctg tcatcccttt tggaacccat tgatctggaa aatttggggc agtgtccttt
240
tccgtaggta ctggaggcac tggcttgaca tactacagcc ctcccaggag gcccagaagg
300
tagatgttat aactaccccc attttccaga tgaagaaact gagcctctgg gatctgcgga
360
agctcccaga gctggagcag ttagtccctg ggccctacac tcacagcaca gtttccc
417
```

```
<210> 646
<211> 95
<212> PRT
<213> Homo sapiens
```

<400> 646  
Met Val Gly Glu Thr Val Gly Ala Thr Ala Gly Thr Met Glu Leu Arg

1				5					10					15	
Arg	Ser	Leu	Cys	His	Pro	Phe	Trp	Asn	Pro	Leu	Ile	Trp	Lys	Ile	Trp
			20					25					30		
Gly	Ser	Val	Leu	Phe	Arg	Arg	Tyr	Trp	Arg	His	Trp	Leu	Asp	Ile	Leu
		35					40					45			
Gln	Pro	Ser	Gln	Glu	Ala	Gln	Lys	Val	Asp	Val	Ile	Thr	Thr	Pro	Ile
	50					55				60					
Phe	Gln	Met	Lys	Lys	Leu	Ser	Leu	Trp	Asp	Leu	Arg	Lys	Leu	Pro	Glu
65					70				75					80	
Leu	Glu	Gln	Leu	Val	Pro	Gly	Pro	Tyr	Thr	His	Ser	Thr	Val	Ser	
			85					90						95	

&lt;210&gt; 647

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 647

acgcgttttcg gttcttgagc gcttccacca attcagcggg ggtgagcggc ccctgtgcat  
60  
cgcgacgacg ggtgatcaga taggcgatat ccgcctcggt cagttgcacg gtgtcgttat  
120  
cggtagccat gcgtggcgaa ctcttttggc atgggaaaat cgggtgaggg caacggggcac  
180  
agcaacagga cgtgtccctt gcggcacgtg gcaacacgtc agtatagcgc gtttcggccg  
240  
ggatttccgt tgaatgaagg caagaagtcg ggcacgcac cacctgctac cgctcgggtg  
300  
tacgatagcc gcggcgccac caggttggct acattccaaa cgcaacgcag gaaccgcac  
360  
gaacagcggt tttcgcaaca aacccttat gacgctggct ctcgggcatt tcagtgtcga  
420  
c  
421

&lt;210&gt; 648

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 648

Met	Gly	Lys	Ser	Gly	Glu	Ala	Asn	Gly	His	Ser	Asn	Arg	Thr	Cys	Pro
1				5					10					15	
Leu	Arg	His	Val	Ala	Thr	Arg	Gln	Tyr	Ser	Ala	Phe	Pro	Pro	Gly	Phe
		20					25					30			
Pro	Leu	Asn	Glu	Gly	Lys	Lys	Ser	Gly	Thr	His	Pro	Pro	Ala	Thr	Ala
		35				40					45				
Arg	Trp	Tyr	Asp	Ser	Arg	Gly	Ala	Thr	Arg	Leu	Ala	Thr	Phe	Gln	Thr
	50				55				60						
Gln	Arg	Arg	Asn	Pro	His	Glu	Gln	Arg	Phe	Ser	Gln	Gln	Thr	Pro	Tyr
65				70				75						80	
Asp	Ala	Gly	Ser	Arg	Ala	Phe	Gln	Cys	Arg						
			85					90							

<210> 649  
 <211> 563  
 <212> DNA  
 <213> Homo sapiens

<400> 649  
 cgcaacatgc ataaacacat gtgtcctccc gagactcagc tacttccttt gccctctctg  
 60  
 gacctcagtg tccaggcttg tgcatttagg ggctcagggt tgggctctgt gcctatgagc  
 120  
 cagtctatgt gtgcactgtc tgtctgtctg tccgtctgcc agcaaccttc aaggccccag  
 180  
 gagggaagg caccaatgga aggtgggggc agggaaggag gtagcgttga caagttccaa  
 240  
 tgtctggctt tccctcctgg aaacccccgag ctggggctgg ccccccttc ccttcctgtc  
 300  
 tctctcgctc aagcagctcc cttctaagag cccctctctg cagacgcccc cagtggaaac  
 360  
 aagcctagat tcgctgccaa gaaggccgac attttttaga cttgccacgt taaaggggac  
 420  
 tgcacaggca cgcactcaaa tccccccctc catgtcctcc gcctgtgcac attcaggcaa  
 480  
 cccgaaacac acaaagacac ggttggacac agcggccacc tgtgcacaca ggaggttagca  
 540  
 catggagcgc atctgacccc ggg  
 563

<210> 650  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 650  
 Met His Lys His Met Cys Ser Ser Glu Thr Gln Leu Leu Pro Leu Pro  
 1 5 10 15  
 Ser Leu Asp Leu Ser Val Gln Ala Cys Ala Phe Arg Gly Ser Gly Leu  
 20 25 30  
 Gly Ser Val Pro Met Ser Gln Ser Met Cys Ala Leu Ser Val Cys Leu  
 35 40 45  
 Ser Val Cys Gln Gln Pro Ser Arg Pro Gln Glu Gly Lys Ala Pro Met  
 50 55 60  
 Glu Gly Gly Gly Arg Glu Gly Gly Ser Val Asp Lys Phe Gln Cys Leu  
 65 70 75 80  
 Ala Phe Pro Pro Gly Asn Pro Glu Leu Gly Leu Ala Pro Pro Ser Leu  
 85 90 95  
 Pro Val Ser Leu Ala Gln Ala Arg Pro Phe  
 100 105

<210> 651  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 651

gaattcttca acaagctctc ctgctctagg atcaaggata gacctataca aggtccaaac  
 60  
 cataatggag tccatgggggt caaagttatc tcctggagct cagcagttga tggatatggg  
 120  
 taggtgtcag cagcggaatt gtattcccat tggagagcag cttcagtcgg tgttggggcaa  
 180  
 ttctggatac aagcatatga ttggactaca atcctcatct accttaggaa ccttaaacia  
 240  
 gtcgtcctcc acaccttttc cttttagaac tggattgaca tctgggaacg tgactgaaaa  
 300  
 cttacaagcg tacattgata aaagtacaca actgcctggg ggagagaatt c  
 351

<210> 652

<211> 95

<212> PRT

<213> Homo sapiens

<400> 652

Met	Glu	Ser	Met	Gly	Ser	Lys	Leu	Ser	Pro	Gly	Ala	Gln	Gln	Leu	Met
1				5				10						15	
Asp	Met	Val	Arg	Cys	Gln	Gln	Arg	Asn	Cys	Ile	Pro	Ile	Gly	Glu	Gln
			20					25					30		
Leu	Gln	Ser	Val	Leu	Gly	Asn	Ser	Gly	Tyr	Lys	His	Met	Ile	Gly	Leu
			35				40					45			
Gln	Ser	Ser	Ser	Thr	Leu	Gly	Thr	Leu	Asn	Lys	Ser	Ser	Ser	Thr	Pro
			50			55					60				
Phe	Pro	Phe	Arg	Thr	Gly	Leu	Thr	Ser	Gly	Asn	Val	Thr	Glu	Asn	Leu
65					70				75					80	
Gln	Ala	Tyr	Ile	Asp	Lys	Ser	Thr	Gln	Leu	Pro	Gly	Gly	Glu	Asn	
				85				90						95	

<210> 653

<211> 399

<212> DNA

<213> Homo sapiens

<400> 653

nncccggtg gggctgggggt gggggccagca tcagaggagg acatgaccaa gctgtgcaac  
 60  
 caccggcgga aagctgttgc tatggcaact ctgtaccgca gcatggagac cacctgtc  
 120  
 cactcttctc ctggagagggg agcgagcccc caaatgttcc acactgtgtc cccagggccc  
 180  
 cctctgccc gccctccctg tcgagttcct cctacaactc cacttaatgg gggctctggc  
 240  
 tcccttcccc cagaaccacc ctcagtttcc caggccttcc ccactctagc aggccctggg  
 300  
 gggcttttcc cccaagget tgetgacca gtcccttctg ggggcagtag cagcccccg  
 360  
 ttcttcccaa ggggcaatgc cccctctcca gccccacct  
 399

<210> 654



<211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 654  
 Xaa Pro Gly Gly Ala Gly Val Gly Pro Ala Ser Glu Glu Asp Met Thr  
 1 5 10 15  
 Lys Leu Cys Asn His Arg Arg Lys Ala Val Ala Met Ala Thr Leu Tyr  
 20 25 30  
 Arg Ser Met Glu Thr Thr Cys Ser His Ser Ser Pro Gly Glu Gly Ala  
 35 40 45  
 Ser Pro Gln Met Phe His Thr Val Ser Pro Gly Pro Pro Ser Ala Arg  
 50 55 60  
 Pro Pro Cys Arg Val Pro Pro Thr Thr Pro Leu Asn Gly Gly Pro Gly  
 65 70 75 80  
 Ser Leu Pro Pro Glu Pro Pro Ser Val Ser Gln Ala Phe Pro Thr Leu  
 85 90 95  
 Ala Gly Pro Gly Gly Leu Phe Pro Pro Arg Leu Ala Asp Pro Val Pro  
 100 105 110  
 Ser Gly Gly Ser Ser Ser Pro Arg Phe Leu Pro Arg Gly Asn Ala Pro  
 115 120 125  
 Ser Pro Ala Pro Pro  
 130

<210> 655  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 655  
 tgaaggaaat tctctatggc ttgtgttcat catgtagaac agcccatgag gagaatagga  
 60  
 gatgaggtgg gaagtgcact gggatctggg ggaagaagcc cggggttcaa gactcagcta  
 120  
 ctgactgcat ggtgtcaaag gattcgggca tcctctctga ggctgagtct tcagatgaca  
 180  
 gtgagaacag ggacacctgc cctgcccttc tcacggggcg tgtgggcacc catgagcatg  
 240  
 cttgacaaat gcaaggtgcc atacaaacag gaactgcaca atctcaccgc ccggcctact  
 300  
 cagcattggt atttttacct ttacatctat atgaagatgt agttccattc cttttaactg  
 360  
 ttgttttc  
 368

<210> 656  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 656  
 Met Ala Cys Val His His Val Glu Gln Pro Met Arg Arg Ile Gly Asp  
 1 5 10 15  
 Glu Val Gly Ser Ala Leu Gly Ser Gly Gly Arg Ser Pro Gly Phe Lys

	20		25		30										
Thr	Gln	Leu	Leu	Thr	Ala	Trp	Cys	Gln	Arg	Ile	Arg	Ala	Ser	Ser	Leu
	35						40					45			
Arg	Leu	Ser	Leu	Gln	Met	Thr	Val	Arg	Thr	Gly	Thr	Pro	Ala	Leu	Pro
	50					55					60				
Phe	Ser	Arg	Gly	Val	Trp	Ala	Pro	Met	Ser	Met	Leu	Asp	Lys	Cys	Lys
65					70					75				80	
Val	Pro	Tyr	Lys	Gln	Glu	Leu	His	Asn	Leu	Thr	Ala	Arg	Pro	Thr	Gln
				85				90						95	
His	Cys	Tyr	Phe	Tyr	Leu	Tyr	Ile	Tyr	Met	Lys	Met				
			100					105							

&lt;210&gt; 657

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 657

gtcgaccacg gcatgaaaaa gccggggatg atcctcatca acaaccctg gggcgagtcc  
60  
aacgaggcgg gcttcaagcg cgcctcgaa gagcgtggca tggccaacgc cggtgtcgag  
120  
cgtattcagg acagcgacct ggacgtgggtg ccgcaattga ccccgctga aaaacgccgg  
180  
tgccgacacc ttgctgatgg tcggcaacgt cggcccttcg gcacaggtgg tcaagtcctt  
240  
ggaccgcatg ggttgggacg tgctgtgggt gtctcactgg gggccggccg gnggtcgctt  
300  
tggcgagctg gcggggccta acgcttctcg  
330

&lt;210&gt; 658

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 658

Met	Lys	Lys	Pro	Gly	Met	Ile	Leu	Ile	Asn	Asn	Pro	Trp	Gly	Glu	Ser
1				5					10					15	
Asn	Glu	Ala	Gly	Phe	Lys	Arg	Ala	Leu	Glu	Glu	Arg	Gly	Met	Ala	Asn
			20					25					30		
Ala	Gly	Val	Glu	Arg	Ile	Gln	Asp	Ser	Asp	Leu	Asp	Val	Val	Pro	Gln
		35				40						45			
Leu	Thr	Pro	Pro	Glu	Lys	Arg	Arg	Cys	Arg	His	Leu	Ala	Asp	Gly	Arg
	50				55					60					
Gln	Arg	Arg	Pro	Phe	Gly	Thr	Gly	Gly	Gln	Val	Pro	Gly	Pro	His	Gly
65				70					75					80	
Leu	Gly	Arg	Ala	Cys	Gly	Val	Ser	Leu	Gly	Ala	Gly	Arg	Xaa	Ser	Leu
				85				90						95	
Trp	Arg	Ala	Gly	Gly	Ala										
			100												

&lt;210&gt; 659

&lt;211&gt; 1505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 659

gccaggatca tgtccaccac cacatgccaa gtgggtggcgt tcctcctgtc catcctgggg  
60  
ctggccggct gcatcgcggc caccgggatg gacatgtgga gcaccagga cctgtacgac  
120  
aaccccgta cctccgtgtt ccagtacgaa gggctctgga ggagctgctg gaggcagagt  
180  
tcaggcttca ccgaatgcag gccctatttc accatcctgg gacttccagc catgctgcag  
240  
gcagtgcgag ccctgatgat cgtaggcac gtccctgggtg ccattggcct cctggtatcc  
300  
atctttgccc tgaaatgcat ccgcattggc agcatggagg actctgccaa agccaacatg  
360  
acactgacct ccgggatcat gttcattgtc tcaggctctt gtgcaattgc tggagtgtct  
420  
gtgtttgcca acatgctggt gactaacttc tggatgtcca cagctaacat gtacaccggc  
480  
atgggtggga tgggtgcagac tgttcagacc aggtacacat ttgggtgcggc tctgttcgtg  
540  
ggctgggtcg ctggaggcct cacactaatt gggggtgtga tgatgtgcat cgctgcccgg  
600  
ggcctggcac cagaagaaac caactacaaa gccgtttctt atcatgcctc aggccacagt  
660  
gttgccctaca agcctggagg cttcaaggcc agcactggct ttgggtccaa caccaaaaac  
720  
aagaagatat acgatggagg tgcccgcaca gaggacgagg tacaatctta tccttccaag  
780  
cacgactatg tgtaatgtc taagacctct cagcacgggc ggaagaaact cccggagagc  
840  
tcacccaaaa aacaaggaga tcccatctag atttcttctt gcttttgact cacagctgga  
900  
agttagaaaa gcctcgattt catctttgga gaggccaagt ggtcttagcc tcagtctctg  
960  
tctctaaata ttccaccata aaacagctga gttatttatg aattagaagc tatagctcac  
1020  
atcttcaatc ctctatttct ttttttaaata ataactttct actctgatga gagaatgtgg  
1080  
ttttaatctc tctctcacat tttgatgatt tagacagact cccctctctc ctctagtc  
1140  
ataaacccat tgatgatcta tttcccagct tatccccaag aaaacttttg aaaggaaaga  
1200  
gtagacccaa agatgttatt ttctgctggt tgaattttgt ctccccaccc ccaacttggc  
1260  
tagtaataaa cacttactga agaagaagca ataagagaaa gatatttgta atctctccag  
1320  
cccatgatct cggttttctt aactgtgat cttaaaagt accaaaccaa agtcattttc  
1380  
agtttgaggc aaccaaact ttctactgct gttgacatct tcttattaca gcaacaccat  
1440  
tctaggagtt tcctgagctc tccactggag tcctccctct ctgtcgtctt ctgcagcgg  
1500

taccc

1505

&lt;210&gt; 660

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 660

```

Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile Leu
 1           5           10           15
Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp Ser Thr
      20           25           30
Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln Tyr Glu Gly
      35           40           45
Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe Thr Glu Cys Arg
      50           55           60
Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg
65           70           75           80
Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val
      85           90           95
Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser
      100          105          110
Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser
      115          120          125
Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val
      130          135          140
Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly
145          150          155          160
Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe
      165          170          175
Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met
      180          185          190
Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala
      195          200          205
Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly
      210          215          220
Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
225          230          235          240
Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser
      245          250          255
Lys His Asp Tyr Val
      260

```

&lt;210&gt; 661

&lt;211&gt; 451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 661

```

nnacgcgtgt agtttgtgta tcggcgcgga actcgccgcg tctgatctcg aggagcttcc
60
cccatggacg agattttaac cttgcttgcc ggaggcgggtg acgacgagcc agagtggcat
120

```

gacaaggcat tatgtgccca gactgatccg gaggcattct tccctgaaaa gggaggatcc  
 180  
 acccgtgagg ccaagcgcat ctgtgagtc tgtgaggtcc gccaggagt cttggagtag  
 240  
 gcccttgcca atgacgagag gtccggaatc tggggcggat tgtccgagat ggagaggcgt  
 300  
 cggctgcca agcggggcgt acctgacgtc ggagcgcggg tattgacacg gcccggtaaa  
 360  
 atgccctgtc tgcccgggat ggctgtctgc acgatgcggc atatgcgat atcgacagc  
 420  
 tgggtgtcat cccgtgtccc atgacgtcga c  
 451

<210> 662

<211> 85

<212> PRT

<213> Homo sapiens

<400> 662

Met	Asp	Glu	Ile	Leu	Thr	Leu	Leu	Ala	Gly	Gly	Gly	Asp	Asp	Glu	Pro
1				5					10					15	
Glu	Trp	His	Asp	Lys	Ala	Leu	Cys	Ala	Gln	Thr	Asp	Pro	Glu	Ala	Phe
			20					25					30		
Phe	Pro	Glu	Lys	Gly	Gly	Ser	Thr	Arg	Glu	Ala	Lys	Arg	Ile	Cys	Glu
			35				40					45			
Ser	Cys	Glu	Val	Arg	Gln	Glu	Cys	Leu	Glu	Tyr	Ala	Leu	Ala	Asn	Asp
		50				55				60					
Glu	Arg	Phe	Gly	Ile	Trp	Gly	Gly	Leu	Ser	Glu	Met	Glu	Arg	Arg	Arg
65					70					75				80	
Leu	Arg	Lys	Arg	Ala											
				85											

<210> 663

<211> 552

<212> DNA

<213> Homo sapiens

<400> 663

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 cctacgacg tgctcgtcgt aggggcgggt cccgccgggt ccgcggccgc cgtgtacgcg  
 120  
 gctcgtaagg gcattcgcac cgccatggtc ggggtctcgga tcggcggcca ggtactcgat  
 180  
 accgaggcca tcgacaacct catctcgggt ccgcacacca ccggtccgcg tctggccgac  
 240  
 gccctccgca gccacgtcaa cgactacaac attgacgtta ttgagcgtca gaccgccagc  
 300  
 gccatagaga ccaccggcgg tatgaccacc gtgcatctga ccgacggcga cctgcggggc  
 360  
 cgctcagtca tcgtggccac cgggtgccgc tggcgcaacc ttggcgtacc tggcgaggag  
 420  
 gaataccgca ccaaggggtg gacctactgc ccgactgcg atggcccgct attcacaggc  
 480

aaaaaggtgg cgcgcgtcgg aggtggaaac tccggtattg aggccgctat cgacctcgcc  
 540  
 ggcgcgtcgc ac  
 552

<210> 664  
 <211> 184  
 <212> PRT  
 <213> Homo sapiens

<400> 664  
 Leu Glu Arg Leu Asp Ala Asp Ala Ala Gln Gly Ala Lys Glu Asp Leu  
 1 5 10 15  
 Ser Gln Arg Asp Pro Tyr Asp Val Leu Val Val Gly Ala Gly Pro Ala  
 20 25 30  
 Gly Ala Ala Ala Ala Val Tyr Ala Ala Arg Lys Gly Ile Arg Thr Ala  
 35 40 45  
 Met Val Gly Ser Arg Ile Gly Gly Gln Val Leu Asp Thr Glu Ala Ile  
 50 55 60  
 Asp Asn Leu Ile Ser Val Pro His Thr Thr Gly Pro Arg Leu Ala Asp  
 65 70 75 80  
 Ala Leu Arg Ser His Val Asn Asp Tyr Asn Ile Asp Val Ile Glu Arg  
 85 90 95  
 Gln Thr Ala Ser Ala Ile Glu Thr Thr Gly Gly Met Thr Thr Val His  
 100 105 110  
 Leu Thr Asp Gly Asp Leu Arg Ala Arg Ser Val Ile Val Ala Thr Gly  
 115 120 125  
 Ala Arg Trp Arg Asn Leu Gly Val Pro Gly Glu Glu Glu Tyr Arg Thr  
 130 135 140  
 Lys Gly Val Thr Tyr Cys Pro His Cys Asp Gly Pro Leu Phe Thr Gly  
 145 150 155 160  
 Lys Lys Val Ala Val Val Gly Gly Gly Asn Ser Gly Ile Glu Ala Ala  
 165 170 175  
 Ile Asp Leu Ala Gly Val Val Asp  
 180

<210> 665  
 <211> 352  
 <212> DNA  
 <213> Homo sapiens

<400> 665  
 acgcgtacag ttcgccgtcg aggttgaaca ccacgatcgg tgtaccggtc acttcgtcga  
 60  
 acacgctctt catttcgccc ggcagcagtt cggcgccggc gcagacaaag gtccaggcct  
 120  
 cgetcacgcg gtggccccgg ccagcggctt ttccaggatc tcgaaacgca ggtcgcgcg  
 180  
 cttggggatg ccgaatcggt cgtcgccata cgggaacggc ttcttgatgc cgggtgcgcg  
 240  
 gtagccgcgg cgetcgtaga agcgatcaga tcgcgcgcac gtcgatcact gtcattctgca  
 300  
 ttaccggcac gttccattcg cgcgcggcgt gggcttcggc ggcgtccatc aa  
 352

<210> 666  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 666  
 Met Glu Arg Ala Gly Asn Ala Asp Asp Ser Asp Arg Arg Ala Arg Asp  
 1 5 10 15  
 Leu Ile Ala Ser Thr Ser Ala Ala Ala Thr Cys Ala Pro Ala Ser Arg  
 20 25 30  
 Ser Arg Ser Arg Met Ala Thr Asn Asp Ser Ala Ser Pro Ser Ala Thr  
 35 40 45  
 Thr Cys Val Ser Arg Ser Trp Lys Ser Arg Trp Pro Gly Pro Pro Arg  
 50 55 60  
 Glu Arg Gly Leu Asp Leu Cys Leu Arg Arg Arg Arg Thr Ala Ala Gly  
 65 70 75 80  
 Arg Asn Glu Glu Arg Val Arg Arg Ser Asp Arg Tyr Thr Asp Arg Gly  
 85 90 95  
 Val Gln Pro Arg Arg Arg Thr Val Arg  
 100 105

<210> 667  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 667  
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 60  
 cgggagatct ttgaatctct eggcccggtg ctcgacaaga atccgcagta cgtggaggca  
 120  
 gccgtgttgt cgcgcattctg cgaaccggaa cgccagatca ttttcgggt gccgtgggtt  
 180  
 gacgacgagg gcaagatccg tatcaaccgt ggcttcgcg ttgaatattc gtcggtactg  
 240  
 gggccgtata aggggtggatt gcgattccac ccctcgggtgt acttaggaac gattaagttc  
 300  
 cttggttttg agcagatctt caaaaatgct ctgactggca tgccgatcgg tggcgcaag  
 360  
 ggtgggtcgg actttgatcc ccatgacgcg t  
 391

<210> 668  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 668  
 Xaa Ala Tyr Glu Ser Val Leu Arg Arg Asn Pro Gly Glu Ala Glu Phe  
 1 5 10 15  
 His Gln Ala Val Arg Glu Ile Phe Glu Ser Leu Gly Pro Val Leu Asp  
 20 25 30  
 Lys Asn Pro Gln Tyr Val Glu Ala Ala Val Leu Ser Arg Ile Cys Glu

35	40	45
Pro Glu Arg Gln Ile Ile Phe Arg Val Pro Trp Val Asp Asp Glu Gly		
50	55	60
Lys Ile Arg Ile Asn Arg Gly Phe Arg Val Glu Tyr Ser Ser Val Leu		
65	70	75
Gly Pro Tyr Lys Gly Gly Leu Arg Phe His Pro Ser Val Tyr Leu Gly		80
	85	90
Thr Ile Lys Phe Leu Gly Phe Glu Gln Ile Phe Lys Asn Ala Leu Thr		95
	100	105
Gly Met Pro Ile Gly Gly Ala Lys Gly Gly Ser Asp Phe Asp Pro His		110
	115	120
Asp Ala		125
130		

&lt;210&gt; 669

&lt;211&gt; 707

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 669

```

nngagtccgt tccccgtcta agtcatcgt ggtggtgctg gcatggccgt caacaaggga
60
attgagaaca cccttgctgc cttcgggccac gcggtcgagg tgggatgcac ctaccttgaa
120
actgacgttc acgcgaccag cgacgggggtg ctagtggcct tccacgatcc gatactcgat
180
cgcgtcactg aatcaggcgg agtcatcgcc gccatgccgt ggcacaagggt caaacaagcc
240
aagggttggtg gcgaaccgat ccccacctta gatgagattt tcgacgcctt tcccgcgcg
300
ttcatcaata tcgacatcaa gcatgatggc gccaccatgc cggtcatcga cgttctttcc
360
cgtcaccggg cttggagtcg ggtttgcgtc gggtcgttca gcagtaaacy catccagacc
420
ttcgtcgcc tggttcaggg acgcaactgcg actgcagtgg ggtcgggtggg agtcnnngct
480
gggctgtcat cagccctcat agcatgcaga tggcacagtc ccatgggaat gcgtaccagg
540
tgccgcaccg cttgaccggg tnatgggggtg ccccttgatga caccgacctt cattaaagct
600
gccatcgtc aggggagagc tgttcatgtc tggacgggta atgagatctc tgaggctcga
660
gaactgatgg atatgggggt cgacggcatc gtcacagatc gtccgga
707

```

&lt;210&gt; 670

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 670

Met Ala Val Asn Lys Gly Ile Glu Asn Thr Leu Ala Ala Phe Gly His
1 5 10 15
Ala Val Glu Val Gly Cys Thr Tyr Leu Glu Thr Asp Val His Ala Thr



```

      20              25              30
Ser Asp Gly Val Leu Val Ala Phe His Asp Pro Ile Leu Asp Arg Val
      35              40              45
Thr Glu Ser Gly Gly Val Ile Ala Ala Met Pro Trp His Lys Val Lys
      50              55              60
Gln Ala Lys Val Gly Gly Glu Pro Ile Pro Thr Leu Asp Glu Ile Phe
      65              70              75              80
Asp Ala Phe Pro Asp Ala Phe Ile Asn Ile Asp Ile Lys His Asp Gly
      85              90              95
Ala Thr Met Pro Leu Ile Asp Val Leu Ser Arg His Arg Ala Trp Ser
      100             105             110
Arg Val Cys Val Gly Ser Phe Ser Ser Lys Arg Ile Gln Thr Phe Arg
      115             120             125
Arg Leu Val Gln Gly Arg Thr Ala Thr Ala Val Gly Ser Val Gly Val
      130             135             140
Xaa Ala Gly Leu Ser Ser Ala Leu Ile Ala Cys Arg Trp His Ser Pro
      145             150             155             160
Met Gly Met Arg Thr Arg Cys Arg Thr Ala
      165             170

```

<210> 671  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens

<400> 671  
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 cagctcagag catggggcgg ccttggetca ctacgcctgc agctgtgaat tcgttctcgc  
 120  
 gtgctggaga gggatctggt tatctccatt ctcttgtctc cacgtggaaa ggaaggacgt  
 180  
 gcgctctcat cctacgtgtt ttgagaaatc gcattgtccc cagctctgcg ggaggatctg  
 240  
 gggacgcagt ggggaaccag acaggcagtt ggaggtctag tgcgcgccag aagccagttc  
 300  
 ccaccaggg tgccatttgc tgggcgcctt agggagctgc gtgggcatcc agaggagtga  
 360  
 gtcgccccct gctctgtcga gtgccactt ccccgggcag ggcaggcggtt attaacgtag  
 420  
 agggagaaca cccatgcaca caac  
 444

<210> 672  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 672  
 Met Gly Ser Glu Gly Asp Gly Thr Cys Arg Lys Gly Pro Ala Ala Gln  
 1 5 10 15  
 Ser Met Gly Arg Pro Trp Leu Thr Thr Pro Ala Ala Val Asn Ser Phe  
 20 25 30  
 Ser Gly Ala Gly Glu Gly Ser Gly Tyr Leu His Ser Leu Val Ser Thr

```

      35              40              45
Trp Lys Gly Arg Thr Cys Ala Leu Ile Leu Arg Val Leu Arg Asn Arg
  50              55              60
Ile Val Pro Ser Ser Ala Gly Gly Ser Gly Asp Ala Val Gly Asn Gln
65              70              75              80
Thr Gly Ser Trp Arg Ser Ser Ala Arg Gln Lys Pro Val Pro Thr Gln
      85              90              95
Gly Ala Ile Cys Trp Ala Pro
      100

```

<210> 673  
 <211> 452  
 <212> DNA  
 <213> Homo sapiens

```

<400> 673
acgcgtccct gcagaaatcc tctcggccta ggtcatccgc aagatgtggc agggcatgca
60
ccgtgaaagc cttcaagtct gccgcagcaa gaccgcacgc ctgctgaaat tcgcagttgt
120
gccgcggtcc ctgatgcgga caaactcggc caccacgacg agcctgacgc ttgcggacca
180
acgttcaaact actgtgcact tgaaacgtcc gggccgcacg acctgggtga ctttgtgcga
240
ccgacattac ttatgttcac gctctttcag ttcttgtcaa taccgtattt ttgctcgacg
300
tctccatcag aaaaatgtcg gtgttaccgc accgcagacg atgcgtaccc ttgcgctgac
360
gatggaggcc ttgaaaagtg cattagccac tactgggcga atctacggca aaaagctgtt
420
actaggcggg gattggggag gcccgtagtg gc
452

```

<210> 674  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

```

<400> 674
Met Trp Gln Gly Met His Arg Glu Ser Leu Gln Val Cys Arg Ser Lys
  1              5              10              15
Thr Ala Arg Leu Leu Lys Phe Ala Val Val Pro Arg Ser Leu Met Arg
      20              25              30
Thr Asn Ser Ala Thr Thr Ile Ser Leu Thr Leu Ala Asp Gln Arg Ser
      35              40              45
Asn Thr Val His Leu Lys Arg Pro Gly Arg Ile Thr Trp Val Thr Leu
      50              55              60
Cys Asp Arg His Tyr Leu Cys Ser Arg Ser Phe Ser Ser Cys Gln Tyr
65              70              75              80
Arg Ile Phe Arg Arg Arg Leu His Gln Lys Asn Val Gly Val Thr Ala
      85              90              95
Pro Gln Thr Met Arg Thr Leu Ala Leu Thr Met Glu Ala Leu Lys Ser
      100              105              110
Ala Leu Ala Thr Thr Gly Arg Ile Tyr Gly Lys Lys Leu Leu Leu Gly

```

115  
Gly Asp Trp Gly Gly Pro  
130

120

125

&lt;210&gt; 675

&lt;211&gt; 8564

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 675

```

atgtcgggct ccacacagct tgtggcacag acgtggaggg ccaactgagcc ccgctacccg
60
ccccacagcc ttctctaccc agtgcagatc gcccgagcgc acacggacgt cgggctcctg
120
gagtaccagc accactcccc cgactatgcc tcccacctgt cgccgggctc catcatccag
180
ccccagcggc ggagggcctc cctgctgtct gagttccagc ccgggaatga acgggtcccag
240
gagctccacc tgcggccaga gtccactca tacctgcccc agctggggaa gtcagagatg
300
gagttcattg aaagcaagcg ccctcggcta gagctgctgc ctgacccccct gctgcgaccg
360
tcacccctgc tggccacggg ccagcctgcg ggatctgaag acctcaccaa ggaccgtagc
420
ctgacgggca agctggaacc ggtgtctccc ccagcccccc cgcacactga ccctgagctg
480
gagctggtgc cgccacggct gtccaaggag gagctgatcc agaacatgga ccgctgggac
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600
gaggaggagg ctgccaagcc gcccgagcct gagaagcccc tgtcacccgc gcccatcgag
660
tcgaagcacc gcagcctggt gcagatcatc tacgacgaga accggaagaa ggctgaagct
720
gcacatcgga ttctggaagg cctggggccc caggtggagc tgccgctgta caaccagccc
780
tccgacaccc ggcagtatca tgagaacatc aaaataaacc aggcgatgcg gaagaagcta
840
atcttgact tcaagaggag gaatcacgct cggaacaat gggagcagaa gttctgccag
900
cgctatgacc agctcatgga ggcctgggaa aaaaaggagg agcgcatcga gaacaacccc
960
cggcggcggg ccaaggagag caaggtgcgc gagtactacg aaaagcagtt ccctgagatc
1020
cgcaagcagc gcgagctgca ggagcgcagc cagggcaggg tgggccagcg gggcagtggt
1080
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1140
gagcaggaga acctggagaa gcagatgcgc cagctggccg tgatcccgcc catgctgtac
1200
gacgctgacc agcagcgcac caagttcatc aacatgaacg ggcttatggc cgaccccatg
1260
aagggtgtaca aagaccgcca ggtcatgaac atgtggagtg agcaggagaa ggagaccttc
1320

```

cgggagaagt tcatgcagca tcccaagaac tttggcctga tcgcatcatt cctggagagg  
1380  
aagacagtgg ctgagtgcgt cctctattac tacctgacta agaagaatga gaactataag  
1440  
agcctggtga gacggagcta tcggcgccgc ggcaagagcc agcagcagca acaacagcag  
1500  
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1560  
aaagatgaga aggagaagga aaaggaggcg gagaaggagg aggagaagcc ggagggtggag  
1620  
aacgacaagg aagacctcct caaggagaag acagacgaca cctcagggga ggacaacgac  
1680  
gagaaggagg ctgtggcctc caaaggccgc aaaactgcc aacagccaggg aagacgcaaa  
1740  
ggccgcatca cccgctcaat ggctaagtga gccaacagcg aggaggccat cccccccag  
1800  
cagagcgccg agctggcctc catggagctg aatgagagtt ctcgctggac agaagaagaa  
1860  
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1920  
atggtgggct ccaagactgt gtcgcagtgt aagaacttct acttcaacta caagaagagg  
1980  
cagaacctcg atgagatctt gcagcagcac aagctgaaga tggagaagga gaggaacgcg  
2040  
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2100  
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2580  
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2700  
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2760  
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2880  
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2940

aaagtccatg agcccccccg ggaggacgca gctcccacca agccagctcc cccagcccca  
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ccgccaccgc aaaacctgca gccggagagc gacgcccctc agcagcctgg cagcagcccc  
3060  
cggggcaaga gcaggagccc ggcaccccc gccgacaagg aggccttcgc agccgaggcc  
3120  
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3180  
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3240  
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3300  
cccaccatct ccaaccgcgc tcccctcatc tcctctgcca agcaccacag cgtcctcgag  
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3420  
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3480  
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3540  
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3600  
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3660  
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3720  
aagggcacca tcaccaggat catcggcgag gacagccga gtcgcttga ccgcggccgg  
3780  
gaggacagcc tgcccaaggg ccacgtcatc tacgaaggca agaagggcca cgtcttgtcc  
3840  
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3900  
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<211> 2518

<212> PRT

<213> Homo sapiens

<400> 676

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Thr	His	Thr	Asp	Val	Gly	Leu	Leu	Glu	Tyr	Gln	His	His	Ser	Arg	Asp
		35				40					45				
Tyr	Ala	Ser	His	Leu	Ser	Pro	Gly	Ser	Ile	Ile	Gln	Pro	Gln	Arg	Arg
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Arg	Pro	Ser	Leu	Leu	Ser	Glu	Phe	Gln	Pro	Gly	Asn	Glu	Arg	Ser	Gln
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Glu	Leu	His	Leu	Arg	Pro	Glu	Ser	His	Ser	Tyr	Leu	Pro	Glu	Leu	Gly
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Lys	Ser	Glu	Met	Glu	Phe	Ile	Glu	Ser	Lys	Arg	Pro	Arg	Leu	Glu	Leu
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Pro	Ala	Gly	Ser	Glu	Asp	Leu	Thr	Lys	Asp	Arg	Ser	Leu	Thr	Gly	Lys
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Pro	Leu	Gly	Gly	Thr	Leu	Asp	Gly	Val	Tyr	Pro	Thr	Leu	Met	Glu	Pro
				1925					1930					1935	
Val	Leu	Leu	Pro	Lys	Glu	Ala	Pro	Arg	Val	Ala	Arg	Pro	Glu	Arg	Pro
			1940					1945					1950		
Arg	Ala	Asp	Thr	Gly	His	Ala	Phe	Leu	Ala	Lys	Pro	Pro	Ala	Arg	Ser
		1955					1960					1965			
Gly	Leu	Glu	Pro	Ala	Ser	Ser	Pro	Ser	Lys	Gly	Ser	Glu	Pro	Arg	Pro
	1970					1975					1980				
Leu	Val	Pro	Pro	Val	Ser	Gly	His	Ala	Thr	Ile	Ala	Arg	Thr	Pro	Ala
1985				1990						1995					2000
Lys	Asn	Leu	Ala	Pro	His	His	Ala	Ser	Pro	Asp	Pro	Pro	Ala	Pro	Pro
			2005						2010					2015	
Ala	Ser	Ala	Ser	Asp	Pro	His	Arg	Glu	Lys	Thr	Gln	Ser	Lys	Pro	Phe
			2020					2025					2030		
Ser	Ile	Gln	Glu	Leu	Glu	Leu	Arg	Ser	Leu	Gly	Tyr	His	Gly	Ser	Ser
	2035					2040					2045				
Tyr	Ser	Pro	Glu	Gly	Val	Glu	Pro	Val	Ser	Pro	Val	Ser	Ser	Pro	Ser
	2050					2055					2060				
Leu	Thr	His	Asp	Lys	Gly	Leu	Pro	Lys	His	Leu	Glu	Glu	Leu	Asp	Lys
2065				2070						2075					2080
Ser	His	Leu	Glu	Gly	Glu	Leu	Arg	Pro	Lys	Gln	Pro	Gly	Pro	Val	Lys
			2085						2090					2095	
Leu	Gly	Gly	Glu	Ala	Ala	His	Leu	Pro	His	Leu	Arg	Pro	Leu	Pro	Glu
			2100					2105					2110		
Ser	Gln	Pro	Ser	Ser	Ser	Pro	Leu	Leu	Gln	Thr	Ala	Pro	Gly	Val	Lys
	2115					2120					2125				
Gly	His	Gln	Arg	Val	Val	Thr	Leu	Ala	Gln	His	Ile	Ser	Glu	Val	Ile
	2130					2135					2140				
Thr	Gln	Asp	Tyr	Thr	Arg	His	His	Pro	Gln	Gln	Leu	Ser	Ala	Pro	Leu
2145				2150					2155						2160
Pro	Ala	Pro	Leu	Tyr	Ser	Phe	Pro	Gly	Ala	Ser	Cys	Pro	Val	Leu	Asp
			2165					2170						2175	
Leu	Arg	Arg	Pro	Pro	Ser	Asp	Leu	Tyr	Leu	Pro	Pro	Pro	Asp	His	Gly
			2180					2185					2190		
Ala	Pro	Ala	Arg	Gly	Ser	Pro	His	Ser	Glu	Gly	Gly	Lys	Arg	Ser	Pro
	2195					2200						2205			
Glu	Pro	Asn	Lys	Thr	Ser	Val	Leu	Gly	Gly	Gly	Glu	Asp	Gly	Ile	Glu
	2210					2215					2220				
Pro	Val	Ser	Pro	Pro	Glu	Gly	Met	Thr	Glu	Pro	Gly	His	Ser	Arg	Ser
2225	</														

[illegible]

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<210> 677
<211> 345
<212> DNA
<213> Homo sapiens
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<400> 677
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60
gagggtatag ctccggcacg ccggtggtgtt ccacagattg aagttacttt cgatatcgat
120
gccaacggta tcttgaatgt gagcgcaaag gataaggcta ccggtaaagga acagaagatt
180
cgcatcgaag cttcaagtgg tttgagtcag gaagaaatcg acagaatgaa agctgaggca
240
gaacagaatg cagcagcagg caaggctgaa cgcgaaaaga ttgataagct gaaccaagct
300
gactcaatga tttccccccc cgaaaactcc tgaaagacaa cgatn
345
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<210> 678
<211> 110
<212> PRT
<213> Homo sapiens
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<400> 678  
Val Met Gln Gly Glu Arg Pro Met Ala Ala Gln Asn Lys Ser Ile Gly  
1 5 10 15  
Gln Phe Thr Leu Glu Gly Ile Ala Pro Ala Arg Arg Gly Val Pro Gln

	20		25		30										
Ile	Glu	Val	Thr	Phe	Asp	Ile	Asp	Ala	Asn	Gly	Ile	Leu	Asn	Val	Ser
	35						40					45			
Ala	Lys	Asp	Lys	Ala	Thr	Gly	Lys	Glu	Gln	Lys	Ile	Arg	Ile	Glu	Ala
	50					55					60				
Ser	Ser	Gly	Leu	Ser	Gln	Glu	Glu	Ile	Asp	Arg	Met	Lys	Ala	Glu	Ala
65					70				75					80	
Glu	Gln	Asn	Ala	Ala	Ala	Gly	Lys	Ala	Glu	Arg	Glu	Lys	Ile	Asp	Lys
			85						90					95	
Leu	Asn	Gln	Ala	Asp	Ser	Met	Ile	Ser	Pro	Pro	Glu	Asn	Ser		
	100							105					110		

&lt;210&gt; 679

&lt;211&gt; 362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 679

acgcgtgacg tcaccgctcc atggggaaga tgacgactat ccctgtgaaa gtaaagcata  
60atgggaaaaa tgtacgttaa atgtgctaac gcgcagtatg atgtatctat gaatcttgag  
120ggtacaggcc tggatttcaa gcgtgccatt gctgacgtca cgcattgtgcc acccgaacgc  
180caaaaagtac tcatcaaggg aggattgcta aaagacgata cccattagg taaagtgggt  
240gcgcgtgcag gacagcagtt catggtgctg ggtgctgtgg gtgagctgcc caaggcccca  
300gaaaaacctg tgctgttcct ggaggatttg ccggaagacg agctcaacaa ggctaaggat  
360

cc

362

&lt;210&gt; 680

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 680

Met Gly Lys Met Tyr Val Lys Cys Ala Asn Ala Gln Tyr Asp Val Ser  
1 5 10 15Met Asn Leu Glu Gly Thr Gly Leu Asp Phe Lys Arg Ala Ile Ala Asp  
20 25 30Val Thr His Val Pro Pro Glu Arg Gln Lys Val Leu Ile Lys Gly Gly  
35 40 45Leu Leu Lys Asp Asp Thr Pro Leu Gly Lys Val Gly Ala Arg Ala Gly  
50 55 60Gln Gln Phe Met Val Leu Gly Ala Val Gly Glu Leu Pro Lys Ala Pro  
65 70 75 80Glu Lys Pro Val Leu Phe Leu Glu Asp Leu Pro Glu Asp Glu Leu Asn  
85 90 95Lys Ala Lys Asp  
100

<210> 681  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 681  
 acgcgtccaa atggacaaac gcttgatgat ttctaccatg aaattagagc aaaatatcca  
 60  
 gaacaattac tgatggcaga ctgttcaaca gtagaagaaa tgattcacgc tgatgaactc  
 120  
 ggttttgatt ttatcggaag tacttttagta ggatatacaa aacaaagtaa aggtgacaaa  
 180  
 atcgaagaaa atgactttga aatcttgaga acagtttttag aacgaattaa acatccacta  
 240  
 attgcagaag gcaatatoga tacacctgaa aagggtgaaac gtgtgcttga gttaggcgcg  
 300  
 tatagtgtcg ttgtaggggc agcgattact cgtccacaac tcatcacgaa aaaattt  
 357

<210> 682  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 682  
 Thr Arg Pro Asn Gly Gln Thr Leu Asp Asp Phe Tyr His Glu Ile Arg  
 1 5 10 15  
 Ala Lys Tyr Pro Glu Gln Leu Leu Met Ala Asp Cys Ser Thr Val Glu  
 20 25 30  
 Glu Met Ile His Ala Asp Glu Leu Gly Phe Asp Phe Ile Gly Ser Thr  
 35 40 45  
 Leu Val Gly Tyr Thr Lys Gln Ser Lys Gly Asp Lys Ile Glu Glu Asn  
 50 55 60  
 Asp Phe Glu Ile Leu Arg Thr Val Leu Glu Arg Ile Lys His Pro Leu  
 65 70 75 80  
 Ile Ala Glu Gly Asn Ile Asp Thr Pro Glu Lys Val Lys Arg Val Leu  
 85 90 95  
 Glu Leu Gly Ala Tyr Ser Val Val Val Gly Ser Ala Ile Thr Arg Pro  
 100 105 110  
 Gln Leu Ile Thr Lys Lys Phe  
 115

<210> 683  
 <211> 411  
 <212> DNA  
 <213> Homo sapiens

<400> 683  
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 60  
 aatattgttt tgcccgagc gtggttgcatt gattgcgtca gttaccctaa aaaccatgta  
 120  
 ttaagagcac aaagtgcatt acatgcagca gataaagcga ttgtattttt gcgcagtatt  
 180



aattacccca aacaatactt attagcaatt catcatgcaa tttcagcgca cagtgtcagt  
 240  
 ggtaaaatac aggcaatgag tttagaagct caaatagtgc aagatgcaga tagattggat  
 300  
 gcgctagggg caattggcgt ggctcgttgc attcaagtaa gtagccagtt acagcgccca  
 360  
 ctatattctg aagttgaccc cttcagcgag acacgatctc tagtctgcat g  
 411

<210> 684

<211> 137

<212> PRT

<213> Homo sapiens

<400> 684

Xaa	Ser	Asp	Arg	Val	Val	Lys	Leu	Ala	Thr	Leu	Ile	Ala	Glu	Asp	Glu
1				5					10					15	
Gln	Ala	Glu	Met	Asn	Ile	Val	Leu	Pro	Ala	Ala	Trp	Leu	His	Asp	Cys
			20					25					30		
Val	Ser	Tyr	Pro	Lys	Asn	His	Val	Leu	Arg	Ala	Gln	Ser	Ala	Leu	His
		35					40					45			
Ala	Ala	Asp	Lys	Ala	Ile	Val	Phe	Leu	Arg	Ser	Ile	Asn	Tyr	Pro	Lys
	50					55					60				
Gln	Tyr	Leu	Leu	Ala	Ile	His	His	Ala	Ile	Ser	Ala	His	Ser	Val	Ser
65					70					75				80	
Gly	Lys	Ile	Gln	Ala	Met	Ser	Leu	Glu	Ala	Gln	Ile	Val	Gln	Asp	Ala
			85					90					95		
Asp	Arg	Leu	Asp	Ala	Leu	Gly	Ala	Ile	Gly	Val	Ala	Arg	Cys	Ile	Gln
			100				105						110		
Val	Ser	Ser	Gln	Leu	Gln	Arg	Pro	Leu	Tyr	Ser	Glu	Val	Asp	Pro	Phe
		115					120					125			
Ser	Glu	Thr	Arg	Ser	Leu	Val	Cys	Met							
	130					135									

<210> 685

<211> 417

<212> DNA

<213> Homo sapiens

<400> 685

acgcgttgcg ttgcggagtg aacccggaac gatggatgga ttgacactat tcggcctggt  
 60  
 cgccgtcact gcgatgctgg tctgctatgc catggaggac cgcagccact ggttcgtgct  
 120  
 gctgttcgcg gccgcttggc gctcggttcg gcctacggct tectccaagg cgctggccg  
 180  
 ttcggttcg tcgaggcgat atgggcgctc gttgcctgcg gcgtgggtgga cgatcaggcc  
 240  
 gcgatgaccg catcgtccgg cttaagcccg gaaacgaaac cgaccagtgc gctggtttga  
 300  
 tgggcggcgc gtcgctggat gcacagcgtc tcgacgcgag cgtgatgatg gcctcagcgc  
 360  
 gtgcatgccg acgctgtcgc tcatcgcgct acgctcgacc acggcgcgcg gcaatag  
 417

<210> 686  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 686  
 Met Pro Trp Arg Thr Ala Ala Thr Gly Ser Cys Cys Cys Ser Arg Pro  
 1 5 10 15  
 Leu Gly Ala Arg Phe Gly Leu Arg Leu Pro Pro Arg Arg Leu Ala Val  
 20 25 30  
 Arg Leu Arg Arg Gly Asp Met Gly Ala Arg Cys Leu Arg Arg Gly Gly  
 35 40 45  
 Arg Ser Gly Arg Asp Asp Arg Ile Val Arg Leu Lys Pro Gly Asn Glu  
 50 55 60  
 Thr Asp Gln Cys Ala Gly Leu Met Gly Gly Ala Ser Leu Asp Ala Gln  
 65 70 75 80  
 Arg Leu Asp Ala Ser Val Met Met Ala Ser Ala Arg Ala Cys Arg Arg  
 85 90 95  
 Cys Arg Ser Ser Arg Tyr Ala Arg Pro Arg Arg Ala Ala Ile  
 100 105 110

<210> 687  
 <211> 412  
 <212> DNA  
 <213> Homo sapiens

<400> 687  
 nnacgcgtga ccgaccaact gcgagccacc ctgctcgcca tggctgctat ggggttgca  
 60  
 gacggcatcg atattccgtc tggggcgatt attgaaagct gccgcacctt atcagccgtt  
 120  
 ctcgatgaaa cccacggtgg tcgcacgac gagcttcggg taccacctgc gtgcgcggtt  
 180  
 caattggcgg ccattgagtc gggccccaac caccaccggg gcactccgcc caatgtggcc  
 240  
 gagaccgacc ctgtcacctt cctgcagttg gcaactgget tctcacactg gccagaaatg  
 300  
 cgctcagcag gacgggttca ggcgtctgga tcccacgtcg acgacgttgc tggcgtgttc  
 360  
 ccagtcgttg atatggccgg ggttttccgc gacatttttg ccgacgacta ga  
 412

<210> 688  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 688  
 Xaa Arg Val Thr Asp Gln Leu Arg Ala Thr Leu Leu Ala Met Ala Ala  
 1 5 10 15  
 Met Gly Leu His Asp Gly Ile Asp Ile Pro Ser Gly Ala Ile Ile Glu  
 20 25 30  
 Ser Cys Arg Thr Leu Ser Ala Val Leu Asp Glu Thr His Gly Gly Arg

```

      35              40              45
Thr Ile Glu Leu Arg Val Pro Pro Ala Cys Ala Val Gln Leu Ala Ala
  50              55              60
Ile Glu Ser Gly Pro Asn His His Arg Gly Thr Pro Pro Asn Val Ala
  65              70              75              80
Glu Thr Asp Pro Val Thr Phe Leu Gln Leu Ala Thr Gly Phe Ser His
      85              90              95
Trp Pro Glu Met Arg Ser Ala Gly Arg Val Gln Ala Ser Gly Ser His
      100              105              110
Val Asp Asp Val Ala Gly Val Phe Pro Val Val Asp Met Ala Gly Val
      115              120              125
Phe Arg Asp Ile Phe Ala Asp Asp
      130              135

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<210> 689  
 <211> 499  
 <212> DNA  
 <213> Homo sapiens

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<400> 689
cgcgctgcggt tactcgacgt cgattttcat cacggtaacg gcacccagaa cattttttac
60
ccgcgcaatg acgtgatgtt catatcgctg cacggcgagc cggccgtgtc ctatccctac
120
tattcgggggt tcagcgatga agtcggcgca ggtgttggtg aaggggtcaa cctcaactac
180
ccgctgccga aaaacaccgc ctgggatacc taccgcgacg ccctgctgca tgccctgcagg
240
aaactccage aattctcgcc gcaggatttg gtgatctcac tgggggtcga caccttcaag
300
gacgaccoga tcagtcactt cctgctggaa ggcgaggatt tcatcgggat cggcgagctg
360
atagcgagtg tgggttgccc caccctgttt gtgatggaag gcggctatat ggtcgatgaa
420
atcggaatca acgcggtgaa cgtactgcat ggcttcgaga gcaagcgcgc ttgagcatcc
480
gccggaagac ggcgtgata
499

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<210> 690  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

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<400> 690
Arg Val Ala Val Leu Asp Val Asp Phe His His Gly Asn Gly Thr Gln
  1              5              10              15
Asn Ile Phe Tyr Pro Arg Asn Asp Val Met Phe Ile Ser Leu His Gly
      20              25              30
Glu Pro Ala Val Ser Tyr Pro Tyr Tyr Ser Gly Phe Ser Asp Glu Val
      35              40              45
Gly Ala Gly Val Gly Glu Gly Phe Asn Leu Asn Tyr Pro Leu Pro Lys
      50              55              60
Asn Thr Ala Trp Asp Thr Tyr Arg Asp Ala Leu Leu His Ala Cys Arg

```

65					70					75				80	
Lys	Leu	Gln	Gln	Phe	Ser	Pro	Gln	Val	Leu	Val	Ile	Ser	Leu	Gly	Val
				85					90					95	
Asp	Thr	Phe	Lys	Asp	Asp	Pro	Ile	Ser	His	Phe	Leu	Leu	Glu	Gly	Glu
			100					105					110		
Asp	Phe	Ile	Gly	Ile	Gly	Glu	Leu	Ile	Ala	Ser	Val	Gly	Cys	Pro	Thr
		115					120					125			
Leu	Phe	Val	Met	Glu	Gly	Gly	Tyr	Met	Val	Asp	Glu	Ile	Gly	Ile	Asn
	130					135					140				
Ala	Val	Asn	Val	Leu	His	Gly	Phe	Glu	Ser	Lys	Arg	Ala			
145					150					155					

&lt;210&gt; 691

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 691

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ntgctgctg aaaacgtgca ggcggcgca tcagcgactg gcgagcgctt tggctggagt
60
tcgcaaaggc aaggccctg ggagttggcc tgcgacatcg cgctgccgtg cgccaccag
120
aacgaactgg acgccgacgc cgccgcacg ctgctgcgca acggctgcct ttgctggct
180
ggaggcgca atatgccgcc cgcgcttgag gctgtggata tctttatcga ggcgggcatt
240
ctgttcgcgc ccggcaaggc atccaatgcc ggcggcgctgg ccgtgagtgg cctggaaatg
300
tcgcagaacg ccatgcgctt gctgtggacc gccggc
336

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&lt;210&gt; 692

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 692

Xaa	Leu	Arg	Glu	Asn	Val	Gln	Arg	Gly	Ala	Ser	Ala	Thr	Gly	Glu	Arg
1				5					10					15	
Phe	Gly	Trp	Ser	Ser	Gln	Arg	Gln	Gly	Pro	Trp	Glu	Leu	Ala	Cys	Asp
		20						25				30			
Ile	Ala	Leu	Pro	Cys	Ala	Thr	Gln	Asn	Glu	Leu	Asp	Ala	Asp	Ala	Ala
		35					40				45				
Arg	Thr	Leu	Leu	Arg	Asn	Gly	Cys	Leu	Cys	Val	Ala	Gly	Gly	Ala	Asn
	50					55				60					
Met	Pro	Pro	Ala	Leu	Glu	Ala	Val	Asp	Ile	Phe	Ile	Glu	Ala	Gly	Ile
65					70					75					80
Leu	Phe	Ala	Pro	Gly	Lys	Ala	Ser	Asn	Ala	Gly	Gly	Val	Ala	Val	Ser
			85						90				95		
Gly	Leu	Glu	Met	Ser	Gln	Asn	Ala	Met	Arg	Leu	Leu	Trp	Thr	Ala	Gly
			100					105					110		

&lt;210&gt; 693

&lt;211&gt; 580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 693

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ngggcaaccc ggaaggtccg gcgtcccagc cgcctacctc gctgggaccc tggctcttgc
60
gtcccccgct ggccctcctgc ccaagcgact gcggccagga tgggccggaa ggtgaccgtg
120
gccacctgcg cactcaacca gtggggcctg gacttcgagg gcaatttgca aagaatttta
180
aagagtattg aaattgccaa aaacagagga gcaagatata ggcttggacc agagctggaa
240
atatgcggct gcggatgttg ggatcattat tacgagtcgg acaccctctt gcaactcgttt
300
caagtcctag cggcccttgt ggagtctccc gtcactcagg acatcatctg cgacgtgggg
360
atacctgtaa tgcaccgaaa cgtccgctac aactgcagag tgatattcct caacaggaag
420
atcctgctca tcagacccaa gatggccttg gccaatgaag gcaactaccg cgagctgcgc
480
tggttcacc cgtggctcag gagtcggtga gtcgggtgcc tgaccactcc tgggatgtgc
540
gttaagcacc tccgctgtgt gtagccttgg gtcctgatca
580

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&lt;210&gt; 694

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 694

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Met Gly Arg Lys Val Thr Val Ala Thr Cys Ala Leu Asn Gln Trp Ala
1      5      10      15
Leu Asp Phe Glu Gly Asn Leu Gln Arg Ile Leu Lys Ser Ile Glu Ile
20     25     30
Ala Lys Asn Arg Gly Ala Arg Tyr Arg Leu Gly Pro Glu Leu Glu Ile
35     40     45
Cys Gly Cys Gly Cys Trp Asp His Tyr Tyr Glu Ser Asp Thr Leu Leu
50     55     60
His Ser Phe Gln Val Leu Ala Ala Leu Val Glu Ser Pro Val Thr Gln
65     70     75     80
Asp Ile Ile Cys Asp Val Gly Ile Pro Val Met His Arg Asn Val Arg
85     90     95
Tyr Asn Cys Arg Val Ile Phe Leu Asn Arg Lys Ile Leu Leu Ile Arg
100    105    110
Pro Lys Met Ala Leu Ala Asn Glu Gly Asn Tyr Arg Glu Leu Arg Trp
115    120    125
Phe Thr Pro Trp Ser Arg Ser Arg
130    135

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&lt;210&gt; 695

&lt;211&gt; 439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 695

ntgggtgactc aggcgtccaa tggcacgatg gctgacgtcg tcaatatgcc gtcctcgacc  
 60  
 atcatggctc tgctgagggc tgattacctg ctcgatatcg agacttcggt gcccgggtatc  
 120  
 ggcgacaagt tcgtcccggc cgtctggggc aaactcaaac tcggcaagga caacgagcac  
 180  
 accgctctgc cctgggtactt cggcccgttc gtcgtgacgt acaacaagga cattttcaag  
 240  
 gatgttgccc tcgatcccga aatcccgcgc aagacgatga ccgagtacct cgacttcgcc  
 300  
 aagaaaatca ccgctgccgg caagcaggcg gtctatggca acacgtcgtg gtacatgctc  
 360  
 gcggaatggc gtgccctcgg cgtcaaggtc atgaatgacg acttcaccaa gtacactttt  
 420  
 gcctcggaat ccaacgcgt  
 439

&lt;210&gt; 696

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 696

Xaa	Val	Thr	Gln	Ala	Ser	Asn	Gly	Thr	Met	Ala	Asp	Val	Val	Asn	Met
1				5				10						15	
Pro	Ser	Ser	Thr	Ile	Met	Ala	Leu	Ser	Arg	Ala	Asp	Tyr	Leu	Leu	Asp
			20					25					30		
Ile	Glu	Thr	Ser	Val	Pro	Gly	Ile	Gly	Asp	Lys	Phe	Val	Pro	Asp	Val
		35					40					45			
Trp	Gly	Lys	Leu	Lys	Leu	Gly	Lys	Asp	Asn	Glu	His	Thr	Ala	Leu	Pro
	50				55					60					
Trp	Tyr	Phe	Gly	Pro	Phe	Val	Val	Thr	Tyr	Asn	Lys	Asp	Ile	Phe	Lys
65				70					75					80	
Asp	Val	Gly	Leu	Asp	Pro	Glu	Ile	Pro	Pro	Lys	Thr	Met	Thr	Glu	Tyr
			85					90						95	
Leu	Asp	Phe	Ala	Lys	Lys	Ile	Thr	Ala	Ala	Gly	Lys	Gln	Ala	Val	Tyr
		100						105					110		
Gly	Asn	Thr	Ser	Trp	Tyr	Met	Leu	Ala	Glu	Trp	Arg	Ala	Leu	Gly	Val
	115					120					125				
Lys	Val	Met	Asn	Asp	Asp	Phe	Thr	Lys	Phe	Thr	Phe	Ala	Ser	Glu	Ser
	130					135					140				
Asn	Ala														
145															

&lt;210&gt; 697

&lt;211&gt; 368

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 697

nggcaataac gccgtcgtcg aaatccgttc ccttgatctc gaacatgccg atgaagcggg  
 60

tgtcgggtgat ggggtcggag atgtcgccct cccacaactt gaacttgatc ggaccaaccc  
 120  
 ttccaccct ggagagactc gcctgccttg aaagtcttct tgcccttctt gggcaactga  
 180  
 tcgccctccc gaacgagata atccaagctc aagcgaccgc ccaccttgtc gcgcgcctcc  
 240  
 acaccgacgg aatgcgatgc cgggatcgca tcgatgctag cggcgggtgcg tgcaatgaca  
 300  
 atcttgtctt cacgcagcga tacgggcccc cggttggaat cgaacacaaa caccttgaag  
 360  
 gcgttgtn  
 368

<210> 698

<211> 108

<212> PRT

<213> Homo sapiens

<400> 698

Met	Pro	Met	Lys	Arg	Leu	Ser	Val	Met	Gly	Ser	Glu	Met	Ser	Pro	Ser
1				5					10					15	
His	Asn	Leu	Asn	Leu	Ile	Gly	Pro	Thr	Leu	Ser	Thr	Leu	Glu	Arg	Leu
			20					25					30		
Ala	Cys	Leu	Glu	Ser	Leu	Leu	Ala	Leu	Leu	Gly	Gln	Leu	Ile	Ala	Leu
			35				40					45			
Pro	Asn	Glu	Ile	Ile	Gln	Ala	Gln	Ala	Thr	Ala	His	Leu	Val	Ala	Arg
			50			55					60				
Leu	His	Thr	Asp	Gly	Met	Arg	Cys	Arg	Asp	Arg	Ile	Asp	Ala	Ser	Gly
65					70				75					80	
Gly	Ala	Cys	Asn	Asp	Asn	Leu	Val	Phe	Thr	Gln	Arg	Tyr	Gly	Pro	Ala
			85					90					95		
Val	Gly	Ile	Glu	His	Lys	His	Leu	Glu	Gly	Val	Val				
			100					105							

<210> 699

<211> 363

<212> DNA

<213> Homo sapiens

<400> 699

nacgctaca caaatagtat cggaatcatt tcctatcatg ctgctatgac gagatttctc  
 60  
 cacacctcag attggcaact ggggatgact cggcactacc tgtcgaagcg cggcgacgac  
 120  
 gaccacagg cacggtttac tgccgatcga atcgagacgg tcgcgaggct gggcgacggt  
 180  
 gcccggaagg agggctgcga gtttgcgtc gtcgccggag atgtcttcga aaccacaaat  
 240  
 gtctccactc agatcattgc ccgcgcgtgt gaggcgatag cctccattga tctccccgtg  
 300  
 tacctgctgc ccggaaatca cgacagctta gagccggggt gtctctggga tgggccagaa  
 360  
 ttc  
 363

<210> 700  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 700  
 Xaa Ala Tyr Thr Asn Ser Ile Gly Ile Ile Ser Tyr His Ala Ala Met  
 1 5 10 15  
 Thr Arg Phe Leu His Thr Ser Asp Trp Gln Leu Gly Met Thr Arg His  
 20 25 30  
 Tyr Leu Ser Lys Arg Gly Asp Asp Pro Gln Ala Arg Phe Thr Ala  
 35 40 45  
 Asp Arg Ile Glu Thr Val Arg Arg Leu Gly Asp Val Ala Arg Lys Glu  
 50 55 60  
 Gly Cys Glu Phe Val Val Val Ala Gly Asp Val Phe Glu Thr His Asn  
 65 70 75 80  
 Val Ser Thr Gln Ile Ile Ala Arg Ala Cys Glu Ala Ile Ala Ser Ile  
 85 90 95  
 Asp Leu Pro Val Tyr Leu Leu Pro Gly Asn His Asp Ser Leu Glu Pro  
 100 105 110  
 Gly Cys Leu Trp Asp Gly Pro Glu Phe  
 115 120

<210> 701  
 <211> 585  
 <212> DNA  
 <213> Homo sapiens

<400> 701 -  
 nacgcgtccg ggcacaccgt caccgaggcg acgttccacg gccacccac gctgatctat  
 60  
 ttcggctacg tccattgcg cggatgtctgc ccgctgacac tgggcaacat ggtctcggcc  
 120  
 ctcgatcgcc tgggctcccg ggcggacggc atcggtccga tcttcatctc cgtcgatccg  
 180  
 gcccgcgaca caccgcgct ggtcggacag tatgtcgcgc atttctcgcc gcggatcgtc  
 240  
 gggctgaccg gcaccgcagc gcagctggcg ccggtactgg cggagttcca catcaccgcg  
 300  
 cgcgccgaac ctgcggcaca cgacatggcc gccgacatgt atgccgtcga ccacagcgcc  
 360  
 ctctctatc tgatggacgg caacaaccgc ctgttgcggg tgatggcggt cagcgccgac  
 420  
 gctgcctcgc tgacgcacca gctggcgggc ggcctggccg gggcaagaat gagaccatga  
 480  
 aagcgatcgg accgacggac gccccgaac aggcagcgcc gggctggtcg ttcggcatca  
 540  
 tcctgctgct cggcatcgcc ggcattgctc atttcgtcga ccggt  
 585

<210> 702  
 <211> 159  
 <212> PRT



<213> Homo sapiens

<400> 702

```

Xaa Ala Ser Gly His Thr Val Thr Glu Ala Thr Phe His Gly His Pro
 1           5           10           15
Thr Leu Ile Tyr Phe Gly Tyr Val His Cys Ala Asp Val Cys Pro Leu
      20           25           30
Thr Leu Gly Asn Met Val Ser Ala Leu Asp Arg Leu Gly Ser Arg Ala
      35           40           45
Asp Gly Ile Val Pro Ile Phe Ile Ser Val Asp Pro Ala Arg Asp Thr
      50           55           60
Pro Ala Leu Val Gly Gln Tyr Val Ala His Phe Ser Pro Arg Ile Val
65           70           75           80
Gly Leu Thr Gly Thr Ala Ala Gln Leu Ala Pro Val Leu Ala Glu Phe
      85           90           95
His Ile Thr Ala Arg Ala Glu Pro Ala Ala His Asp Met Ala Ala Asp
      100          105          110
Met Tyr Ala Val Asp His Ser Ala Leu Leu Tyr Leu Met Asp Gly Asn
      115          120          125
Asn Arg Leu Leu Arg Val Met Ala Val Ser Ala Asp Ala Ala Ser Leu
      130          135          140
Thr His Gln Leu Ala Ala Gly Leu Ala Gly Ala Arg Met Arg Pro
145          150          155

```

<210> 703

<211> 390

<212> DNA

<213> Homo sapiens

<400> 703

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ttctctgctc catacacacc tcagcagaat ggcatcgccg agcgcaagaa cataactctt
60
attgagatgg cccgaacgat gcttgatgag tacaagactc cgcggaagtt ctggcctgaa
120
gccattgata ctgcttggtca caccatcaac cgcgtttatc ttcacaaggt tttggagaaa
180
acctcttatg agttcctaac tggttaagaaa cccaatgtaa gctatttcag agtatttggt
240
gctaggtgct ggatcaagga tcctcatcac acttcaaaaat ttgcaccgaa agcacatgaa
300
ggttttatgc ttggttacgg aaaggattcg cactcctaca gagtcttcaa cctctttcac
360
tataaagtgg ttcaaactgt ggatgtgcgn
390

```

<210> 704

<211> 130

<212> PRT

<213> Homo sapiens

<400> 704

```

Phe Ser Ala Pro Tyr Thr Pro Gln Gln Asn Gly Ile Ala Glu Arg Lys
 1           5           10           15
Asn Ile Thr Leu Ile Glu Met Ala Arg Thr Met Leu Asp Glu Tyr Lys

```

```

      20      25      30
Thr Pro Arg Lys Phe Trp Pro Glu Ala Ile Asp Thr Ala Cys His Thr
      35      40      45
Ile Asn Arg Val Tyr Leu His Lys Val Leu Glu Lys Thr Ser Tyr Glu
      50      55      60
Phe Leu Thr Gly Lys Lys Pro Asn Val Ser Tyr Phe Arg Val Phe Gly
65      70      75      80
Ala Arg Cys Trp Ile Lys Asp Pro His His Thr Ser Lys Phe Ala Pro
      85      90      95
Lys Ala His Glu Gly Phe Met Leu Gly Tyr Gly Lys Asp Ser His Ser
      100      105      110
Tyr Arg Val Phe Asn Leu Phe His Tyr Lys Val Val Gln Thr Val Asp
      115      120      125
Val Arg
      130

```

&lt;210&gt; 705

&lt;211&gt; 513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 705

```

acgcgtattt cgtccaaatg attcaaatca aaacgccgcc gttaaaaacg atgcaggcga
60
agacaatgcg aataaaaaaag gtggtaaata agcatgagtt ttaaaatgac acaatctcaa
120
tacacaagtc tttatggacc aactgtagga gactccgtga gattaggaga tacgaacttg
180
tttgacaaag ttgagaaaga ctatgcaaat tatggggatg aagctacttt cgggtggcga
240
aaatcaattc gtgatggtat ggctcaaaat cctaattgtga caagagatga taaaaatgta
300
gccgatttag ttttaactaa cgcattaatt attgattatg acaagattgt taaagcagat
360
atcgggtatta aaaatgggta tattttttaag attggtaaag ctggaaaccc agatataatg
420
gataacgttg acatcatcat tgggtcaaca actgatatta ttgctgctga aggtaaaatt
480
gttactgccg gcggtatcga tacacacgtg cac
513

```

&lt;210&gt; 706

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 706

```

Met Ser Phe Lys Met Thr Gln Ser Gln Tyr Thr Ser Leu Tyr Gly Pro
1      5      10      15
Thr Val Gly Asp Ser Val Arg Leu Gly Asp Thr Asn Leu Phe Ala Gln
      20      25      30
Val Glu Lys Asp Tyr Ala Asn Tyr Gly Asp Glu Ala Thr Phe Gly Gly
      35      40      45
Gly Lys Ser Ile Arg Asp Gly Met Ala Gln Asn Pro Asn Val Thr Arg

```

50	55	60
Asp Asp Lys Asn Val	Ala Asp Leu Val Leu Thr	Asn Ala Leu Ile Ile
65	70	75
Asp Tyr Asp Lys Ile	Val Lys Ala Asp Ile Gly	Ile Lys Asn Gly Tyr
85	90	95
Ile Phe Lys Ile Gly	Lys Ala Gly Asn Pro Asp	Ile Met Asp Asn Val
100	105	110
Asp Ile Ile Ile Gly	Ala Thr Thr Asp Ile Ile	Ala Ala Glu Gly Lys
115	120	125
Ile Val Thr Ala Gly	Gly Ile Asp Thr His Val	His
130	135	140

&lt;210&gt; 707

&lt;211&gt; 409

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 707

```

acgcgtggca tcctcagacc accaaagaca atcctgtcct gggaggcagg gagaaagccg
60
gcacactaca cagtgcacag gtgaagccct caggggggtcc tggagcaggg ccacctccct
120
gggggatccc caggtgccat tttcatggca gtgtctatgg acggctcccc ttggcatggt
180
gctgggtggc aatcctggct gtagctgcca cccctgccc tttttgttc cctccgaggg
240
cattgtgatc atcagtgtga gtctgttggg aaggagagcc aggtccccag gtttgggaaa
300
ggagttaggt ttccagcct gtctggccat cccccccag ccagcccct cctgctgggt
360
gacgtgtca gttcgcccc tgctgtactg ggagggggct aggagcata
409

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&lt;210&gt; 708

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 708

Met Leu Leu Ala	Pro Ser Gln Tyr	Ser Arg Gly Arg	Thr Glu His Val
1	5	10	15
Thr Gln Gln Glu	Gly Leu Gly Trp	Gly Val Met Ala	Arg Gln Ala Gly
20	25	30	
Lys Pro Tyr Ser	Phe Pro Lys Pro	Gly Asp Leu Ala	Leu Leu Pro Asn
35	40	45	
Arg Leu Thr Leu	Met Ile Thr Met	Pro Ser Glu Gly	Ser Lys Lys Gly
50	55	60	
Arg Gly Trp Gln	Leu Gln Pro Gly	Leu Pro Pro Ser	Thr Met Pro Arg
65	70	75	80
Gly Ala Val His	Arg His Cys His	Glu Asn Gly Thr	Trp Gly Ser Pro
85	90	95	
Arg Glu Val Ala	Leu Leu Gln Asp	Pro Leu Arg Ala	Ser Pro Val His
100	105	110	
Cys Val Val Cys	Arg Leu Ser Pro	Cys Leu Pro Gly	Gln Asp Cys Leu

115 120  
 Trp Trp Ser Glu Asp Ala Thr Arg  
 130 135

125

<210> 709  
 <211> 771  
 <212> DNA  
 <213> Homo sapiens

<400> 709  
 acgcgtctga cggagagcct cctgagtctc cccacgcaga ggactcagaa agggaatcgg  
 60  
 tgaccacacc tgggccagcg acgtgtggtg cgccagcctc cccagcggat cacctcctcc  
 120  
 tcccctccca ggaggagagt ttctccgaag tccccatgag tgaagcaagc tcagcgaaag  
 180  
 acactccact ctttaggag gagggagagg atgcccttgt gactcagtat cagagcaaag  
 240  
 ccagtgaacca cgaagggtta ttgtctgacc ccttgagtga ccttcagttg gtctcagatt  
 300  
 ttaaatctcc aatcatggcc gatctgaact taagccttcc ttccattcct gaagtcgcat  
 360  
 cggatgatga aagaatagat cagggttgaag atgacggaga tcagggttga gatgatggag  
 420  
 agacagcaaa gtcgtcaact ctggacatag gagctttgtc cttgggcttg gtagtcccct  
 480  
 gtctctgagag gggaaagggg cccagtggcg aggcagatag gttgggtactg ggggagggcc  
 540  
 tgtgtgattt caggctgcaa gcacccagc catctgtgac agctccttca gagcagacca  
 600  
 cagagttcgg aattcacaaa ccacatcttg gcaagagctc aagcttggat aaacagctgc  
 660  
 caggccccag tgggtgtgag gaagaaaaac cgatgggaaa tgggagtcca agccgcctc  
 720  
 ctggcacatc cctggacaat cctgtaccca gcccctcccc ttctgagatc t  
 771

<210> 710  
 <211> 205  
 <212> PRT  
 <213> Homo sapiens

<400> 710  
 Met Ser Glu Ala Ser Ser Ala Lys Asp Thr Pro Leu Phe Arg Met Glu  
 1 5 10 15  
 Gly Glu Asp Ala Leu Val Thr Gln Tyr Gln Ser Lys Ala Ser Asp His  
 20 25 30  
 Glu Gly Leu Leu Ser Asp Pro Leu Ser Asp Leu Gln Leu Val Ser Asp  
 35 40 45  
 Phe Lys Ser Pro Ile Met Ala Asp Leu Asn Leu Ser Leu Pro Ser Ile  
 50 55 60  
 Pro Glu Val Ala Ser Asp Asp Glu Arg Ile Asp Gln Val Glu Asp Asp  
 65 70 75 80  
 Gly Asp Gln Val Glu Asp Asp Gly Glu Thr Ala Lys Ser Ser Thr Leu

85								90				95			
Asp	Ile	Gly	Ala	Leu	Ser	Leu	Gly	Leu	Val	Val	Pro	Cys	Pro	Glu	Arg
100								105				110			
Gly	Lys	Gly	Pro	Ser	Gly	Glu	Ala	Asp	Arg	Leu	Val	Leu	Gly	Glu	Gly
115								120				125			
Leu	Cys	Asp	Phe	Arg	Leu	Gln	Ala	Pro	Gln	Ala	Ser	Val	Thr	Ala	Pro
130								135				140			
Ser	Glu	Gln	Thr	Thr	Glu	Phe	Gly	Ile	His	Lys	Pro	His	Leu	Gly	Lys
145								150				155			
Ser	Ser	Ser	Leu	Asp	Lys	Gln	Leu	Pro	Gly	Pro	Ser	Gly	Gly	Glu	Glu
165								170				175			
Glu	Lys	Pro	Met	Gly	Asn	Gly	Ser	Pro	Ser	Pro	Pro	Pro	Gly	Thr	Ser
180								185				190			
Leu	Asp	Asn	Pro	Val	Pro	Ser	Pro	Ser	Pro	Ser	Glu	Ile			
195								200				205			

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<210> 711
<211> 432
<212> DNA
<213> Homo sapiens
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<400> 711
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60
attctcctgt tttatatcta ctcccccta ggttcacct actccctcat cttctgagct
120
aatgtgcccg ctttatttgc acttgcatgg aatatgatta tgaacacagt ttttatcatt
180
gatgaccacc ccgttatcag gttggcgatt cgtatgttgt tggaacacga gggttataag
240
gtcgttggtg aaacggacaa cggttgtgac gcgatccaaa tggttcgcga atgcctgccg
300
gacctgatca tcctggatat cagcatcccg aaactcgacg gcctcgaagt gctctgccga
360
ttcaacgcca tgaacacatc catgaaaacc ctgattctta ccgccagag tccgacgttg
420
ttcgccacgc gt
432
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<210> 712
<211> 93
<212> PRT
<213> Homo sapiens
```

```

<400> 712
Met Ile Met Asn Thr Val Phe Ile Ile Asp Asp His Pro Val Ile Arg
 1             5             10             15
Leu Ala Ile Arg Met Leu Leu Glu His Glu Gly Tyr Lys Val Val Gly
          20             25             30
Glu Thr Asp Asn Gly Cys Asp Ala Ile Gln Met Val Arg Glu Cys Leu
          35             40             45
Pro Asp Leu Ile Ile Leu Asp Ile Ser Ile Pro Lys Leu Asp Gly Leu
          50             55             60
Glu Val Leu Cys Arg Phe Asn Ala Met Asn Thr Ser Met Lys Thr Leu

```

804

<210> 715  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 715  
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 60  
 cagaccggcc tgctgcctca ggcactggtg cgtttgccgc aggcagcgcc gacggtggag  
 120  
 tgcaagttgg taccgggggt ttccctggag ttgctcagcc aggtggacgc aggcgagctg  
 180  
 gactcggcga tcatcattcg cccgcccttt gatttgccca aggagttgca cgtacaggta  
 240  
 ctgcgcaagg agccgtttgt gttgatcgtg cccagggcgg tcgggggtga tgaccggtg  
 300  
 caactgctcg aagctcatcc ccacgtgcgc tacgaccgcg cttcgtttgg cggg  
 354

<210> 716  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<400> 716  
 Xaa Pro Val Asp Ala Asn Glu Tyr Arg Gly Glu Leu Lys Val Gly Ala  
 1 5 10 15  
 Ile Thr Thr Ala Gln Thr Gly Leu Leu Pro Gln Ala Leu Val Arg Leu  
 20 25 30  
 Arg Gln Ala Ala Pro Thr Val Glu Cys Lys Leu Val Pro Gly Val Ser  
 35 40 45  
 Leu Glu Leu Leu Ser Gln Val Asp Ala Gly Glu Leu Asp Ser Ala Ile  
 50 55 60  
 Ile Ile Arg Pro Pro Phe Asp Leu Pro Lys Glu Leu His Val Gln Val  
 65 70 75 80  
 Leu Arg Lys Glu Pro Phe Val Leu Ile Val Pro Gln Ala Val Gly Gly  
 85 90 95  
 Asp Asp Pro Leu Gln Leu Leu Glu Ala His Pro His Val Arg Tyr Asp  
 100 105 110  
 Arg Ala Ser Phe Gly Gly  
 115

<210> 717  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 717  
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 60  
 ccgttaagtc atctaaatag gccattctgt ggctctccat cagtaagaac caaatccata  
 120  
 ggagaagttg agcggatagt aatgcatcaa attgatgctg agaaaccgaa aaatgggaca  
 180

atataatcaa gctgacaata ctgatcaaac cactcgcatg aaagctacta ccgcttgacc  
 240  
 accaagcaga aaaaaccaat gaaatgctta aaaataaaat cgtccaaagt aaaaagctag  
 300  
 accaggtggt agccagatta aaaataggcc gctctagaaa atgaaaagaa atccaatgag  
 360  
 attcaacggc gtagcaccag cacagcaaca tagccactag t  
 401

<210> 718  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 718  
 Met Leu Leu Cys Trp Cys Tyr Ala Val Glu Ser His Trp Ile Ser Phe  
 1 5 10 15  
 His Phe Leu Glu Arg Pro Ile Phe Asn Leu Ala Thr Thr Trp Ser Ser  
 20 25 30  
 Phe Leu Leu Trp Thr Ile Leu Phe Leu Ser Ile Ser Leu Val Phe Ser  
 35 40 45  
 Ala Trp Trp Ser Ser Gly Ser Ser Phe His Ala Ser Gly Leu Ile Ser  
 50 55 60  
 Ile Val Ser Leu Ile Ile Leu Ser His Phe Ser Val Ser Gln His Gln  
 65 70 75 80  
 Phe Asp Ala Leu Leu Ser Ala Gln Leu Leu Leu Trp Ile Trp Phe Leu  
 85 90 95  
 Leu Met Glu Ser His Arg Met Ala Tyr Leu Asp Asp Leu Thr Ala Leu  
 100 105 110  
 Pro Gly Arg Arg Ala Leu Asn Glu Lys Leu Val Gly Leu Pro Lys Arg  
 115 120 125  
 Tyr Ala  
 130

<210> 719  
 <211> 685  
 <212> DNA  
 <213> Homo sapiens

<400> 719  
 tatatagggc tatctacctt attcacagca cattccatct acacaacctt gtagcgttca  
 60  
 ctcttgaagg cggattttca taggcgctgc gcctctcata ttcaagcatc aaggcaatcc  
 120  
 aatctccctg cggttggtaac tgggcaaaag aaagacctct gcagtccagc aacctcatcg  
 180  
 tgcaaagtcc gtggcggtgt caactctgac ggcttggaag ctgcagacct tgtcaaagga  
 240  
 cctcggccga aattcaccct tgatctcttt gtcttgtcca actcttgtcc ctgagaatga  
 300  
 aactgtcttc tgagagtcca tcaatgcgac gctgactcgt gagaagtgtc gaatcacgtc  
 360  
 gccattttgg agacctgcc acgcagctct ggaacctgcc aggacgcctt ccacaacacc  
 420



agaacgcagc gactttgcgt taaatccaag ctcaaacc tcttgctcca caggcctgag  
 480  
 cataaaaagg tattctgcga cgggaaatgt aaagtctgag cttaggtgca gattaccgcc  
 540  
 atcgatcagt gtctgatact gcttgctccgc gacttctttg ccgagcaatg ggtatagcgt  
 600  
 tttcaaccaa gtggaagcag tcgtttgctc accctggcga ttccggcgag ttagggacat  
 660  
 gaccacgtca tcgatgggat tttgc  
 685

<210> 720

<211> 161

<212> PRT

<213> Homo sapiens

<400> 720

Met	Ser	Leu	Thr	Arg	Arg	Asn	Arg	Gln	Gly	Glu	Gln	Thr	Thr	Ala	Ser
1				5				10						15	
Thr	Trp	Leu	Lys	Thr	Leu	Tyr	Pro	Leu	Leu	Gly	Lys	Glu	Val	Ala	Asp
			20					25					30		
Lys	Gln	Tyr	Gln	Thr	Leu	Ile	Asp	Gly	Gly	Thr	Leu	His	Leu	Ser	Ser
			35				40					45			
Asp	Phe	Thr	Phe	Pro	Val	Ala	Glu	Tyr	Leu	Phe	Met	Leu	Arg	Pro	Val
	50					55				60					
Glu	Gln	Glu	Val	Phe	Glu	Leu	Gly	Phe	Asn	Ala	Lys	Ser	Leu	Arg	Ser
65					70				75					80	
Gly	Val	Val	Glu	Gly	Val	Leu	Ala	Gly	Ser	Arg	Ala	Ala	Leu	Ala	Gly
			85					90					95		
Leu	Gln	Asn	Gly	Asp	Val	Ile	Gln	His	Phe	Ser	Arg	Val	Ser	Val	Ala
			100				105					110			
Leu	Met	Asp	Ser	Gln	Lys	Thr	Val	Ser	Phe	Ser	Gly	Thr	Arg	Val	Gly
		115					120					125			
Gln	Asp	Lys	Glu	Ile	Lys	Gly	Glu	Phe	Arg	Pro	Arg	Ser	Phe	Asp	Lys
	130					135					140				
Val	Cys	Ser	Phe	Gln	Ala	Val	Arg	Val	Asp	His	Ala	Thr	Ala	Phe	Ala
145				150					155					160	

Arg

<210> 721

<211> 579

<212> DNA

<213> Homo sapiens

<400> 721

aagcttggga tcagggtgtg gcagtgtggc gggagtgtgg aggtcctgcc ctgctcacgg  
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 attgccaca ttgagcgagc ccacaagccc tacacagagg acctcaccgc ccatgtccgc  
 120  
 aggaacgctc tcagggtggc tgaagtctgg atggatgaat ttaaaagcca cgtctactgg  
 180  
 catggaacat accaggagga ctcaggaatt gacattgggg acatcactgc aaggaaggct  
 240

ctcaggaac agctgcagtg caagaccttc cggtggtacc tggtcagcgt gtaccagag  
 300  
 atgaggatgt actccgacat cattgcctat ggagtgcctgc agaattctct gaagactgat  
 360  
 ttgtgtcttg accagggggc agatacagag aatgtcccca tcatgtacat ctgccatggg  
 420  
 atgacgcctc agaacgtgta ctacacgagc agtcagcaga tccatgtggg cattctgagc  
 480  
 cccaccgtgg atgatgatga caaccgatgc ctggtggacg tcaacagccg gccccggctc  
 540  
 atcgaatgca gctacgcca agccaagagg atgaagctt  
 579

<210> 722

<211> 193

<212> PRT

<213> Homo sapiens

<400> 722

Lys	Leu	Gly	Ile	Arg	Val	Trp	Gln	Cys	Gly	Gly	Ser	Val	Glu	Val	Leu
1				5					10					15	
Pro	Cys	Ser	Arg	Ile	Ala	His	Ile	Glu	Arg	Ala	His	Lys	Pro	Tyr	Thr
			20					25					30		
Glu	Asp	Leu	Thr	Ala	His	Val	Arg	Arg	Asn	Ala	Leu	Arg	Val	Ala	Glu
		35					40					45			
Val	Trp	Met	Asp	Glu	Phe	Lys	Ser	His	Val	Tyr	Trp	His	Gly	Thr	Tyr
	50					55					60				
Gln	Glu	Asp	Ser	Gly	Ile	Asp	Ile	Gly	Asp	Ile	Thr	Ala	Arg	Lys	Ala
65					70				75					80	
Leu	Arg	Lys	Gln	Leu	Gln	Cys	Lys	Thr	Phe	Arg	Trp	Tyr	Leu	Val	Ser
			85					90					95		
Val	Tyr	Pro	Glu	Met	Arg	Met	Tyr	Ser	Asp	Ile	Ile	Ala	Tyr	Gly	Val
			100					105					110		
Leu	Gln	Asn	Ser	Leu	Lys	Thr	Asp	Leu	Cys	Leu	Asp	Gln	Gly	Pro	Asp
		115					120					125			
Thr	Glu	Asn	Val	Pro	Ile	Met	Tyr	Ile	Cys	His	Gly	Met	Thr	Pro	Gln
	130					135					140				
Asn	Val	Tyr	Tyr	Thr	Ser	Ser	Gln	Gln	Ile	His	Val	Gly	Ile	Leu	Ser
145					150					155				160	
Pro	Thr	Val	Asp	Asp	Asp	Asp	Asn	Arg	Cys	Leu	Val	Asp	Val	Asn	Ser
			165					170						175	
Arg	Pro	Arg	Leu	Ile	Glu	Cys	Ser	Tyr	Ala	Lys	Ala	Lys	Arg	Met	Lys
			180					185					190		

Leu

<210> 723

<211> 384

<212> DNA

<213> Homo sapiens

<400> 723

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 120  
 cgcggaagggg attaccaaatt gcgcattgat acgcgctccg gaacgcctac gctgatgctt  
 180  
 accgtacaaa gtgtaaccga caaacctgtt acggacgtca ctcgacaatg tcctaaatgg  
 240  
 gacggcaagc ccctcaccct tgacgtaacg aatacattcc cggaaggctc cgtcgtagca  
 300  
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<210> 724

<211> 128

<212> PRT

<213> Homo sapiens

<400> 724

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Glu	Ala	Val	Lys	Leu	Asn	Glu	Met	Leu	Ser	Leu	Lys	Pro	Cys	Glu	Gly
			20					25				30			
Thr	Pro	Pro	Gln	Trp	Arg	Leu	Phe	Arg	Glu	Gly	Asp	Tyr	Gln	Met	Arg
			35				40				45				
Ile	Asp	Thr	Arg	Ser	Gly	Thr	Pro	Thr	Leu	Met	Leu	Thr	Val	Gln	Ser
	50					55				60					
Val	Thr	Asp	Lys	Pro	Val	Thr	Asp	Val	Thr	Arg	Gln	Cys	Pro	Lys	Trp
65					70				75					80	
Asp	Gly	Lys	Pro	Leu	Thr	Leu	Asp	Val	Thr	Asn	Thr	Phe	Pro	Glu	Gly
			85					90					95		
Ser	Val	Val	Arg	Asp	Phe	Tyr	Ser	Lys	Gln	Thr	Ala	Met	Val	Gln	Gln
			100					105					110		
Gly	Lys	Ile	Thr	Leu	Gln	Pro	Ala	Ala	Asn	Ser	Asn	Gly	Leu	Leu	Leu
		115					120						125		

<210> 725

<211> 521

<212> DNA

<213> Homo sapiens

<400> 725

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 120  
 gaaaataggt ttccttcttc cacaggcatg gagaaggaag gaaattttgc actggccttt  
 180  
 gggaagctga agaagagctg gggggaggct tgttctgaca aaatagtac tctctccctg  
 240  
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 300  
 tccccttcac cctgctcact gccagagaga ctatgctggg agtgggtgcat cgggtggtctc  
 360

caggcccttt taggctcaag gtgttcattc cctggctcct tccctgccat gtctttgttc  
 420  
 ctctctccct ccttcccatc ccagcagcca cctctctcct tccaccagac ctgggaacca  
 480  
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 521

<210> 726

<211> 124

<212> PRT

<213> Homo sapiens

<400> 726

Met	Glu	Lys	Glu	Gly	Asn	Phe	Ala	Leu	Ala	Phe	Gly	Lys	Leu	Lys	Lys
1				5					10					15	
Ser	Trp	Gly	Glu	Ala	Cys	Ser	Asp	Lys	Ile	Val	Thr	Leu	Ser	Leu	Leu
			20					25					30		
Glu	Met	Ser	His	Arg	Arg	Leu	Phe	Leu	Val	His	Ile	Cys	Pro	Ser	Arg
			35				40					45			
Ser	Thr	Pro	Ser	Pro	Ser	Ser	Cys	Ser	Leu	Pro	Glu	Arg	Leu	Cys	Trp
			50				55				60				
Glu	Trp	Cys	Ile	Gly	Gly	Leu	Gln	Ala	Leu	Leu	Gly	Ser	Arg	Cys	Ser
65					70				75					80	
Phe	Pro	Gly	Ser	Phe	Pro	Ala	Met	Ser	Leu	Phe	Leu	Pro	Pro	Ser	Phe
				85					90					95	
Pro	Ser	Gln	Gln	Pro	Pro	Ser	Ser	Phe	His	Gln	Thr	Trp	Glu	Pro	Ser
			100					105					110		
Ser	Gln	Pro	Gln	Ser	Pro	Arg	Gly	Ser	Ile	Thr	Arg				
			115				120								

<210> 727

<211> 629

<212> DNA

<213> Homo sapiens

<400> 727

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 120  
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 180  
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 240  
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 360  
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 420  
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 480  
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 540

cggttggttc aacgtggcct ggctcatgat tgcggtgccca ctggtggttg ccgcgctgct  
600  
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629

<210> 728

<211> 99

<212> PRT

<213> Homo sapiens

<400> 728

Met	Asn	Pro	Asn	Asp	Tyr	Leu	Val	Leu	Ser	Ala	Ile	Leu	Phe	Ala	Ile
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Gly	Ile	Val	Gly	Phe	Leu	Thr	Arg	Arg	Asn	Ala	Leu	Val	Ala	Phe	Met
		20					25					30			
Ser	Val	Glu	Leu	Met	Leu	Asn	Ala	Ala	Asn	Leu	Ala	Leu	Val	Thr	Phe
	35					40					45				
Ala	His	Val	His	Gly	Ser	Leu	Asp	Gly	Gln	Val	Gly	Val	Phe	Phe	Val
	50					55				60					
Met	Ile	Val	Ala	Ala	Ala	Glu	Val	Val	Val	Gly	Leu	Ala	Ile	Ile	Val
65					70					75				80	
Thr	Ile	Phe	Arg	Ser	Arg	Arg	Thr	Thr	Ser	Val	Asp	Asp	Thr	Asn	Leu
			85						90					95	
Leu	Lys	Phe													

<210> 729

<211> 4716

<212> DNA

<213> Homo sapiens

<400> 729

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120  
ggagaatgta ttcttttgat gatgtgctgg aggaaggaaa gcgaccccct acaatgactg  
180  
tgtcagaagc aagttaccag agtgagagag tagaagagaa gggagcaact tattcttcag  
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300  
attcagcttc cttctcaaag tctgtggaa gaacaaagcc cagcctcttt gtcttctctg  
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600  
ccggacgcaa gccaaactggc ttcaagctta tctagccaga aagaggtagc agcaacagaa  
660

gaagatgtga caaggetgcc ctctcctaca tcccccttct catctctttc ccaagaccag  
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 gtgaggcgct atggaaaggc tggttcacct gaaacaaagt ggattgatgc aacttctgga  
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&lt;210&gt; 730

&lt;211&gt; 797

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 730

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Thr	Asp	Thr	Val	Arg	Leu	Thr	Ser	Val	Val	Thr	Pro	Arg	Pro	Phe	Gly
			20					25					30		
Ser	Gln	Thr	Arg	Gly	Ile	Ser	Ser	Leu	Pro	Arg	Ser	Tyr	Thr	Met	Asp
		35					40					45			
Asp	Ala	Trp	Lys	Tyr	Asn	Gly	Asp	Val	Glu	Asp	Ile	Lys	Arg	Thr	Pro
	50					55				60					
Asn	Asn	Val	Val	Ser	Thr	Pro	Ala	Pro	Ser	Pro	Asp	Ala	Ser	Gln	Leu
65					70					75				80	
Ala	Ser	Ser	Leu	Ser	Ser	Gln	Lys	Glu	Val	Ala	Ala	Thr	Glu	Glu	Asp
			85						90				95		
Val	Thr	Arg	Leu	Pro	Ser	Pro	Thr	Ser	Pro	Phe	Ser	Ser	Leu	Ser	Gln
		100					105					110			
Asp	Gln	Ala	Ala	Thr	Ser	Lys	Ala	Thr	Leu	Ser	Ser	Thr	Ser	Gly	Leu
		115					120					125			
Asp	Leu	Met	Ser	Glu	Ser	Gly	Glu	Gly	Glu	Ile	Ser	Pro	Gln	Arg	Glu
	130					135					140				
Val	Ser	Arg	Ser	Gln	Asp	Gln	Phe	Ser	Asp	Met	Arg	Ile	Ser	Ile	Asn



145					150					155				160	
Gln	Thr	Pro	Gly	Lys	Ser	Leu	Asp	Phe	Gly	Phe	Thr	Ile	Lys	Trp	Asp
				165					170					175	
Ile	Pro	Gly	Ile	Phe	Val	Ala	Ser	Val	Glu	Ala	Gly	Ser	Pro	Ala	Glu
			180					185					190		
Phe	Ser	Gln	Leu	Gln	Val	Asp	Asp	Glu	Ile	Ile	Ala	Ile	Asn	Asn	Thr
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Lys	Phe	Ser	Tyr	Asn	Asp	Ser	Lys	Glu	Trp	Glu	Glu	Ala	Met	Ala	Lys
	210					215					220				
Ala	Gln	Glu	Thr	Gly	His	Leu	Val	Met	Asp	Val	Arg	Arg	Tyr	Gly	Lys
225					230					235					240
Ala	Gly	Ser	Pro	Glu	Thr	Lys	Trp	Ile	Asp	Ala	Thr	Ser	Gly	Ile	Tyr
			245						250					255	
Asn	Ser	Glu	Lys	Ser	Ser	Asn	Leu	Ser	Val	Thr	Thr	Asp	Phe	Ser	Glu
		260						265					270		
Ser	Leu	Gln	Ser	Ser	Asn	Ile	Glu	Ser	Lys	Glu	Ile	Asn	Gly	Ile	His
		275					280					285			
Asp	Glu	Ser	Asn	Ala	Phe	Glu	Ser	Lys	Ala	Ser	Glu	Ser	Ile	Ser	Leu
	290					295					300				
Lys	Asn	Leu	Lys	Arg	Arg	Ser	Gln	Phe	Phe	Glu	Gln	Gly	Ser	Ser	Asp
305					310					315					320
Ser	Val	Val	Pro	Asp	Leu	Pro	Val	Pro	Thr	Ile	Ser	Ala	Pro	Ser	Arg
			325						330					335	
Trp	Val	Trp	Asp	Gln	Glu	Glu	Glu	Arg	Lys	Arg	Gln	Glu	Arg	Trp	Gln
		340					345					350			
Lys	Glu	Gln	Asp	Arg	Leu	Leu	Gln	Glu	Lys	Tyr	Gln	Arg	Glu	Gln	Glu
		355				360					365				
Lys	Leu	Arg	Glu	Glu	Trp	Gln	Arg	Ala	Lys	Gln	Glu	Ala	Glu	Arg	Glu
	370					375					380				
Asn	Ser	Lys	Tyr	Leu	Asp	Glu	Glu	Leu	Met	Val	Leu	Ser	Ser	Asn	Ser
385					390					395					400
Met	Ser	Leu	Thr	Thr	Arg	Glu	Pro	Ser	Leu	Ala	Thr	Trp	Glu	Ala	Thr
			405						410					415	
Trp	Ser	Glu	Gly	Ser	Lys	Ser	Ser	Asp	Arg	Glu	Gly	Thr	Arg	Ala	Gly
		420						425					430		
Glu	Glu	Glu	Arg	Arg	Gln	Pro	Gln	Glu	Glu	Val	Val	His	Glu	Asp	Gln
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Gly	Lys	Lys	Pro	Gln	Asp	Gln	Leu	Val	Ile	Glu	Arg	Glu	Arg	Lys	Trp
	450					455					460				
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465					470					475					480
Ala	Glu	Glu	Gln	Lys	Arg	Pro	Ala	Glu	Gln	Lys	Arg	Gln	Ala	Glu	
			485					490						495	
Ile	Glu	Arg	Glu	Thr	Ser	Val	Arg	Ile	Tyr	Gln	Tyr	Arg	Arg	Pro	Val
		500						505					510		
Asp	Ser	Tyr	Asp	Ile	Pro	Lys	Thr	Glu	Glu	Ala	Ser	Ser	Gly	Phe	Leu
		515					520						525		
Pro	Gly	Asp	Arg	Asn	Lys	Ser	Arg	Ser	Thr	Thr	Glu	Leu	Asp	Asp	Tyr
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Ser	Thr	Asn	Lys	Asn	Gly	Asn	Asn	Lys	Tyr	Leu	Asp	Gln	Ile	Gly	Asn
545					550					555					560
Thr	Thr	Ser	Ser	Gln	Arg	Arg	Ser	Lys	Lys	Glu	Gln	Val	Pro	Ser	Gly
			565					570						575	
Ala	Glu	Leu	Glu	Arg	Gln	Gln	Ile	Leu	Gln	Glu	Met	Arg	Lys	Arg	Thr

580							585					590				
Pro	Leu	His	Asn	Asp	Asn	Ser	Trp	Ile	Arg	Gln	Arg	Ser	Ala	Ser	Val	
595							600					605				
Asn	Lys	Glu	Pro	Val	Ser	Leu	Pro	Gly	Ile	Met	Arg	Arg	Gly	Glu	Ser	
610							615					620				
Leu	Asp	Asn	Leu	Asp	Ser	Pro	Arg	Ser	Asn	Ser	Trp	Arg	Gln	Pro	Pro	
625							630					635				
Trp	Leu	Asn	Gln	Pro	Thr	Gly	Phe	Tyr	Ala	Ser	Ser	Ser	Val	Gln	Asp	
645							650					655				
Phe	Ser	Arg	Pro	Pro	Pro	Gln	Leu	Val	Ser	Thr	Ser	Asn	Arg	Ala	Tyr	
660							665					670				
Met	Arg	Asn	Pro	Ser	Ser	Ser	Val	Pro	Pro	Pro	Ser	Ala	Gly	Ser	Val	
675							680					685				
Lys	Thr	Ser	Thr	Thr	Gly	Val	Ala	Thr	Thr	Gln	Ser	Pro	Thr	Pro	Arg	
690							695					700				
Ser	His	Ser	Pro	Ser	Ala	Ser	Gln	Ser	Gly	Ser	Gln	Leu	Arg	Asn	Arg	
705							710					715				
Ser	Val	Ser	Gly	Lys	Arg	Ile	Cys	Ser	Tyr	Cys	Asn	Asn	Ile	Leu	Gly	
725							730					735				
Lys	Gly	Ala	Ala	Met	Ile	Ile	Glu	Ser	Leu	Gly	Leu	Cys	Tyr	His	Leu	
740							745					750				
His	Cys	Phe	Lys	Cys	Val	Ala	Cys	Glu	Cys	Asp	Leu	Gly	Ser	Ser		
755							760					765				
Ser	Gly	Ala	Glu	Val	Arg	Ile	Arg	Asn	His	Gln	Leu	Tyr	Cys	Asn	Asp	
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<210> 731
<211> 513
<212> DNA
<213> Homo sapiens
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420
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<210> 732

<211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 732

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Phe	Arg	Val	Val	Gly	Lys	Arg	Val	Asn	Thr	Glu	Gln	Lys	Glu	Asn	Lys
		20					25						30		
Thr	His	Thr	Lys	Trp	Trp	Gly	Thr	Gly	His	Phe	Leu	Ile	Thr	His	Phe
		35				40						45			
Leu	Ile	Leu	Pro	Pro	Pro	Leu	His	Thr	Tyr	Leu	Glu	Leu	Lys	Glu	Gln
	50					55				60					
His	Met	Cys	Thr	Cys	Ser	Ser	Arg	Lys	His	Phe	Pro	Leu	Ser	Phe	Leu
65					70					75				80	
Trp	Pro	Asp	Lys	Val	Leu	Thr	Pro	Ser	Arg	Gln	Pro	Glu	Ser	Val	Phe
			85					90						95	
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Glu

<210> 733  
 <211> 4366  
 <212> DNA  
 <213> Homo sapiens

<400> 733

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 420  
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1980  
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<210> 734

<211> 364

<212> PRT

<213> Homo sapiens

<400> 734

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			20					25					30		
Ala	His	Ile	Arg	Ala	Ser	Phe	Arg	Asp	Gly	Asp	Pro	Val	His	Arg	His
		35					40					45			
Arg	Gln	Leu	Ala	Lys	Leu	Leu	Tyr	Val	His	Met	Leu	Gly	Tyr	Pro	Ala
	50					55					60				
His	Phe	Gly	Gln	Met	Glu	Cys	Leu	Lys	Leu	Ile	Ala	Ser	Ser	Arg	Phe
65					70					75				80	
Thr	Asp	Lys	Arg	Val	Gly	Tyr	Leu	Gly	Ala	Met	Leu	Leu	Leu	Asp	Glu
			85					90						95	
Arg	His	Asp	Ala	His	Leu	Leu	Ile	Thr	Asn	Ser	Ile	Lys	Asn	Asp	Leu
			100					105					110		
Ser	Gln	Gly	Ile	Gln	Pro	Val	Gln	Gly	Leu	Ala	Leu	Cys	Thr	Leu	Ser
			115				120					125			
Thr	Met	Gly	Ser	Ala	Glu	Met	Cys	Arg	Asp	Leu	Ala	Pro	Glu	Val	Glu
	130					135					140				
Lys	Leu	Leu	Leu	Gln	Pro	Ser	Pro	Tyr	Val	Arg	Lys	Lys	Ala	Ile	Leu
145					150					155				160	
Thr	Ala	Val	His	Met	Ile	Arg	Lys	Val	Pro	Glu	Leu	Ser	Ser	Val	Phe
			165					170						175	
Leu	Pro	Pro	Cys	Ala	Gln	Leu	Leu	His	Glu	Arg	His	His	Gly	Ile	Leu
			180					185					190		
Leu	Gly	Thr	Ile	Thr	Leu	Ile	Thr	Glu	Leu	Cys	Glu	Arg	Ser	Pro	Ala
		195					200					205			
Ala	Leu	Arg	His	Phe	Arg	Lys	Val	Val	Pro	Gln	Leu	Val	His	Ile	Leu
	210					215					220				
Arg	Thr	Leu	Val	Thr	Met	Gly	Tyr	Ser	Thr	Glu	His	Ser	Ile	Ser	Gly
225					230					235				240	
Val	Ser	Asp	Pro	Phe	Leu	Gln	Val	Gln	Ile	Leu	Arg	Leu	Leu	Arg	Ile
			245					250						255	
Leu	Gly	Arg	Asn	His	Glu	Glu	Ser	Ser	Glu	Thr	Met	Asn	Asp	Leu	Leu
			260					265					270		
Ala	Gln	Val	Ala	Thr	Asn	Thr	Asp	Thr	Ser	Arg	Asn	Ala	Gly	Asn	Ala

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      275              280              285
Val Leu Phe Glu Thr Val Leu Thr Ile Met Asp Ile Arg Ser Ala Ala
  290              295              300
Gly Leu Arg Val Leu Ala Val Asn Ile Leu Gly Arg Phe Leu Leu Asn
  305              310              315              320
Ser Asp Arg Asn Ile Arg Tyr Val Ala Leu Thr Ser Leu Leu Arg Leu
      325              330              335
Val Gln Ser Asp His Ser Ala Val Gln Arg His Arg Pro Thr Val Val
      340              345              350
Glu Cys Leu Arg Glu Thr Asp Ala Ser Leu Ser Arg
      355              360

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<210> 735  
 <211> 597  
 <212> DNA  
 <213> Homo sapiens

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<400> 735
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120
tgcttggtgt cctcgatccc gctctgaccg cccactggac cgctcaaccc aggacatcct
180
cagtgccatc cacgacgtgg ctgcaccgct ggactaccc atcttcgtgg tgggtgccac
240
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300
cgtggatttc gccgttgccg tagaacattg gccgcagttc gaaaacatca agcagcacct
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480
gccagccacc atcaaattggc cgcccgcacat ggctgtcatg atgaatgttg ctggctacgc
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597

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<210> 736  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

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<400> 736
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Ile Ala Trp Cys Pro Arg Ser Arg Ser Asp Arg Pro Leu Asp Arg Ser
      20              25              30
Thr Gln Asp Ile Leu Ser Ala Ile His Asp Val Ala Ala Pro Leu Ala
      35              40              45
Leu Pro Ile Phe Val Val Gly Ala Thr Ala Arg Asp Ile Leu Leu Thr
      50              55              60
His Val Phe Gly Ile Glu Thr Gly Arg Ala Thr Leu Asp Val Asp Phe

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65					70					75				80	
Ala	Val	Ala	Val	Glu	His	Trp	Pro	Gln	Phe	Glu	Asn	Ile	Lys	Gln	His
				85					90					95	
Leu	Leu	Ala	Asn	Asp	His	Phe	Asp	Ser	Ala	Ala	Ser	Ile	Thr	His	Arg
			100					105					110		
Leu	Leu	Tyr	Arg	Thr	Ser	Asp	Asn	Thr	Ile	Ala	Arg	Pro	Ile	Asp	Leu
		115					120					125			
Ile	Pro	Phe	Gly	Gly	Ile	Glu	Gln	Pro	Pro	Ala	Thr	Ile	Lys	Trp	Pro
	130					135					140				
Pro	Asp	Met	Ala	Val	Met	Met	Asn	Val	Ala	Gly	Tyr	Ala	Asp	Ala	Trp
145					150					155				160	
Arg	Ala	Ala	Val	Glu	Val	Glu	Phe	Val	Pro	Gly	Arg	Ser	Ile	Arg	
			165					170						175	

&lt;210&gt; 737

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 737

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cgcgccggca tcgttgggta cggatacgat cccaaccctc acgccgaccg tgccgaccta
120
caccctgccc tgtcctggat cagccacgtc accttcgtta aaactgtcag tgtgggggat
180
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360
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420
actctgaccg ctgatgacat ggccgaactc ctcggaacca ttagctacga gatcacttgc
480
gccatttcca aacgcgt
497

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&lt;210&gt; 738

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 738

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1				5					10					15	
Thr	Ser	Met	Val	Arg	Ala	Gly	Ile	Val	Gly	Tyr	Gly	Tyr	Asp	Pro	Asn
			20					25					30		
Pro	His	Ala	Asp	Arg	Ala	Asp	Leu	His	Pro	Ala	Leu	Ser	Trp	Ile	Ser
		35					40					45			
His	Val	Thr	Phe	Val	Lys	Thr	Val	Ser	Val	Gly	Asp	Thr	Ile	Gly	Tyr
	50					55					60				
Gly	Arg	Thr	Trp	Thr	Ala	Ser	Glu	Thr	Thr	Lys	Ile	Ala	Thr	Val	Pro



65					70					75					80
Val	Gly	Tyr	Ala	Asp	Gly	Leu	Ser	Arg	Gly	Leu	Ser	Asn	Lys	Gly	His
				85					90					95	
Val	Leu	Ile	Arg	Gly	Ser	Val	His	Pro	Ile	Val	Gly	Arg	Ile	Cys	Met
			100					105					110		
Asp	Gln	Phe	Met	Val	Asp	Leu	Gly	Pro	Asp	Ser	Asn	Val	Thr	Val	Gly
		115					120					125			
Asp	Glu	Val	Val	Leu	Ile	Gly	Thr	Gln	Glu	Asp	Glu	Thr	Leu	Thr	Ala
	130					135					140				
Asp	Asp	Met	Ala	Glu	Leu	Leu	Gly	Thr	Ile	Ser	Tyr	Glu	Ile	Thr	Cys
145					150					155					160
Ala	Ile	Ser	Lys	Arg											
				165											

&lt;210&gt; 739

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 739

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120
cagagcagcg gggaggagga gctgcagctc cagctggccc tggccatgag caaggaggag
180
gccgaccage ccccgctctg cggccccgag gacgacgccc agctccagct ggcccttagt
240
ttgagccgag aagagcatga taaggaggag cggatccgct gcggggatga cctgcggctg
300
cagatggcaa tcgaggagag caagagggag actgggggca aggaggagtc gtccctcatg
360
gaccttgctg acgtcttcac gccccagct cctgccccga ccacagaccc ctgggggggc
420
ccagcaccca tggctgct
438

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&lt;210&gt; 740

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 740

Arg	Leu	Arg	Glu	Glu	Arg	Ala	His	Ala	Leu	Lys	Thr	Lys	Glu	Lys	Leu
1				5					10				15		
Ala	Gln	Thr	Ala	Thr	Ala	Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly	Pro	Pro
			20					25					30		
Pro	Glu	Ala	Glu	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu	Glu	Leu
		35					40				45				
Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp	Gln	Pro
	50					55				60					
Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln	Leu	Gln	Leu	Ala	Leu	Ser
65					70				75					80	
Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Glu	Glu	Arg	Ile	Arg	Arg	Gly	Asp

[illegible]

<210> 741

<211> 726

<212> DNA

<213> Homo sapiens

<400> 741

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120
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actgatccgg aagtgagggc tcggtggcag gagaagctag atgccgaggg gccgcgagtt
480
ctgcatgacg agcttgcccg tcgcgatccc aaggcggctg agtcaatctt gcccggaac
540
ggcaggcgaa tcgtttcgtg ccctcgaagt ttattgaccc tgacagggtc ctttactgcc
600
accgatcccc gacgggaccc tccactggcc aagacggtgc aaatgggctt agaactgtcg
660
cgcaaagaca tagaccagcg tattgccgat cgggttgacc agatgtgggc atacggtttc
720
gtcgac
726

```

<210> 742

<211> 242

<212> PRT

<213> Homo sapiens

<400> 742

Ala	Ser	Leu	Arg	Pro	Arg	Cys	Cys	Lys	Asp	Val	Ala	Thr	Val	Arg	Lys
1				5					10					15	
Asn	Glu	Tyr	Val	Asn	Leu	Pro	Val	Ile	Cys	Leu	Val	Gly	Pro	Thr	Ala
			20					25					30		
Ser	Gly	Lys	Ser	Gly	Leu	Ala	Val	Arg	Val	Cys	Arg	Arg	Leu	Tyr	Val

35	40	45
Asp Glu His Pro Ala Glu Ile Asn Thr Asp Ser Met Val Val Tyr		
50	55	60
Arg Gly Met Asp Ile Gly Thr Ala Thr Pro Thr Leu Arg Glu Gln Arg		
65	70	75
Thr Val Val His His Leu Val Ser Ile Leu Asp Val Thr Val Pro Ser		
85	90	95
Ser Leu Val Leu Met Gln Thr Leu Ala Arg Asp Ala Val Glu Asp Cys		
100	105	110
Leu Ser Arg Gly Val Ile Pro Val Leu Val Gly Gly Ser Ala Leu Tyr		
115	120	125
Thr Lys Ala Ile Ile Asp Glu Met Ser Ile Pro Pro Thr Asp Pro Glu		
130	135	140
Val Arg Ala Arg Trp Gln Glu Lys Leu Asp Ala Glu Gly Pro Arg Val		
145	150	155
Leu His Asp Glu Leu Ala Arg Arg Asp Pro Lys Ala Ala Glu Ser Ile		
165	170	175
Leu Pro Gly Asn Gly Arg Arg Ile Val Ser Cys Pro Arg Ser Leu Leu		
180	185	190
Thr Leu Thr Gly Ser Phe Thr Ala Thr Asp Pro Arg Arg Asp Pro Pro		
195	200	205
Leu Ala Lys Thr Val Gln Met Gly Leu Glu Leu Ser Arg Lys Asp Ile		
210	215	220
Asp Gln Arg Ile Ala Asp Arg Val Asp Gln Met Trp Ala Tyr Gly Phe		
225	230	235
Val Asp		240

&lt;210&gt; 743

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 743

naaaaaagtg atggttttcgg atctgtggcc agtcgtcttg caagaaatca ttatgacgtg  
60  
gatgaggggca acagcancat tcatgttaat caagacattg cgcgcagaac agggacggga  
120  
aagctatttg tacgagtgtg cccggcgcac gtgtactcag aggagcccga tggcactatt  
180  
tccgtggagt acgcagcgtg tctggagtgt ggcacttgtc tggcggttgc tgcgccaggg  
240  
tcgcttgaat ggcactatcc cgcaggtgca atgggtattt cgttcagaga aggatgaagt  
300  
ccttgtgggc gactgtaaag cgacatggcc gtcgctcggg aggaggaatt gtggtgtccg  
360  
caccaaatag tgctcaggat gaagttcgtc atggaaatcc ggctccaacc gtttcgggag  
420  
ctggtcgcga  
430

&lt;210&gt; 744

&lt;211&gt; 98

&lt;212&gt; PRT

<213> Homo sapiens

<400> 744

```

Xaa Lys Ser Asp Gly Phe Gly Ser Val Ala Ser Arg Leu Ala Arg Asn
 1           5           10           15
His Tyr Asp Val Asp Glu Gly Asn Ser Xaa Ile His Val Asn Gln Asp
      20           25           30
Ile Ala Arg Arg Thr Gly Thr Gly Lys Leu Leu Val Arg Val Cys Pro
      35           40           45
Ala His Val Tyr Ser Glu Glu Pro Asp Gly Thr Ile Ser Val Glu Tyr
      50           55           60
Ala Ala Cys Leu Glu Cys Gly Thr Cys Leu Ala Val Ala Ala Pro Gly
65           70           75           80
Ser Leu Glu Trp His Tyr Pro Ala Gly Ala Met Gly Ile Ser Phe Arg
      85           90           95
Glu Gly

```

<210> 745

<211> 362

<212> DNA

<213> Homo sapiens

<400> 745

```

cggccgattg aagcgtcgct gcggtttgag tcggtgatgg atgcggtgga cggtgcttcg
60
gcgtcgtggg ggcgcatggc gcggtatttc atcgccgagc ttgaacgcag cagcgagttg
120
tatgagcagg cggcgtttac ccgcgatctg gaaagctcgc tgatcaaggg cctgatcctc
180
gcccagccga acaactactc cgaagaactg cgcgacgtac tcggcgtgaa gctgccgcat
240
tacttgattc gcgcgcggca gtacatccac gacaacgccc gcgaagccgt gcatctggaa
300
gacctgaaaa ccgctgccgg ggtatcgcgg ttcaagttgt tcgatgcgtt tcgcaaatac
360
tt
362

```

<210> 746

<211> 108

<212> PRT

<213> Homo sapiens

<400> 746

```

Met Asp Ala Val Asp Gly Ala Ser Ala Ser Trp Trp Arg Met Ala Arg
 1           5           10           15
Tyr Phe Ile Ala Glu Leu Glu Arg Ser Ser Glu Leu Tyr Glu Gln Ala
      20           25           30
Ala Phe Thr Arg Asp Leu Glu Ser Ser Leu Ile Lys Gly Leu Ile Leu
      35           40           45
Ala Gln Pro Asn Asn Tyr Ser Glu Glu Leu Arg Asp Val Leu Gly Val
      50           55           60
Lys Leu Pro His Tyr Leu Ile Arg Ala Arg Gln Tyr Ile His Asp Asn

```

```

65              70              75              80
Ala Arg Glu Ala Val His Leu Glu Asp Leu Glu Thr Ala Ala Gly Val
              85              90              95
Ser Arg Phe Lys Leu Phe Asp Ala Phe Arg Lys Tyr
              100              105

```

<210> 747  
 <211> 416  
 <212> DNA  
 <213> Homo sapiens

```

<400> 747
naccggttga tcgccgccga ccgtttcatc ccgcaatcac ccgacatggc ggcctatttt
60
ctgaatgccg atggcacgcc taaagccacc ggcacgctgc tcaagaaccc agcgtggcc
120
gccgtgttca aacgtatcgc caaggaagga ccggacgcgc tgtaccacgg gccgattgcc
180
gacgagatcg cgcgcaaggt tcagggcaac cgcaatgcgg gcagcctgtc gcaagcggac
240
ctcaaggctt acaccgccaa ggaacgcacg ccgctgtgca ccgactacaa gcaatatcag
300
gtgtgcggca tgccaccgcc gtcgtcaggg gggattgcgg tggcgcagat cctcggcacg
360
ctgcaggccg tggaagcccg cgacccacgc ctggccatcg ccccatgaa accggt
416

```

<210> 748  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

```

<400> 748
Xaa Ala Leu Ile Ala Ala Asp Arg Phe Ile Pro Gln Ser Pro Asp Met
1      5      10      15
Ala Ala Tyr Phe Leu Asn Ala Asp Gly Thr Pro Lys Ala Thr Gly Thr
20     25     30
Leu Leu Lys Asn Pro Ala Leu Ala Ala Val Phe Lys Arg Ile Ala Lys
35     40     45
Glu Gly Pro Asp Ala Leu Tyr His Gly Pro Ile Ala Asp Glu Ile Ala
50     55     60
Arg Lys Val Gln Gly Asn Arg Asn Ala Gly Ser Leu Ser Gln Ala Asp
65     70     75     80
Leu Lys Ala Tyr Thr Ala Lys Glu Arg Thr Pro Leu Cys Thr Asp Tyr
85     90     95
Lys Gln Tyr Gln Val Cys Gly Met Pro Pro Pro Ser Ser Gly Gly Ile
100    105    110
Ala Val Ala Gln Ile Leu Gly Thr Leu Gln Ala Val Glu Ala Arg Asp
115    120    125
Pro Arg Leu Ala Ile Ala Pro Met Lys Pro
130    135

```

<210> 749  
 <211> 1211

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 749

nagtcctaga cgccagaccc gctcagaccc tcctgccagg tgacagccgc caagatgggg  
 60  
 tcttggggccc tgetgtggcc tccctgctg ttcaccgggc tgctcgccg acccccgggg  
 120  
 accatggccc agggccagta ctgctctgtg aacaaggaca tctttgaagt agaggagaac  
 180  
 acaaatgtca ccgagccgct ggtggacatc cacgtcccgg agggccagga ggtgaccctc  
 240  
 ggagccttgt ccacccctt tgcatttcgg atccaggga accagctgtt tctcaacgtg  
 300  
 actcctgatt acgaggagaa gtcactgctt gaggtcagc tgctgtgtca gagcggaggg  
 360  
 acattggtga ccagctaag ggtgttcgtg tcagtgtgtg acgtcaatga caatgcccc  
 420  
 gaattccctt ttaagaccaa ggagataagg gtggaggagg acacgaaagt gaactccacc  
 480  
 gtcacccccg agacgcaact gcaggctgag gaccgcgaca aggacgacat tctgttctac  
 540  
 accctccagg aaatgacagc aggtgccagt gactacttct ccctgggtgag tgtaaaccgt  
 600  
 cccgccctga ggctggaccg gccctggac ttctacgagc ggccgaacat gaccttctgg  
 660  
 ctgctggtgc gggacactcc gggggagaat gtggaaccca gccacactgc caccgccaca  
 720  
 ctagtgctga acgtggtgcc cgccgacctg cggcccccggt gggttcctgcc ctgcaccttc  
 780  
 tcagatggct acgtctgcat tcaagctcag taccacgggg ctgtccccac ggggcacata  
 840  
 ctgccatctc ccctcgctct gcgtcccga cccatctacg ctgaggacgg agaccgaggc  
 900  
 atcaaccagc ccacatctta cagcatcttt aggggaaacg tgaatggtac attcatcatc  
 960  
 caccagact cgggcaacct caccgtggcc aggagtgtcc ccagcccat gaccttcctt  
 1020  
 ctgctggtga agggccaaca ggccgacctt gcccgctact cagtgaacca ggtcaccgtg  
 1080  
 gagggctgtg gctgcggccg ggagcccgcc ccgcttcccc cagagcctgt atcgtggcac  
 1140  
 cgtggcgctg ggcgctggag cgggcgttgt ggtcaaggat gcagctgcc cttttcagcc  
 1200  
 tctgaggatc c  
 1211

&lt;210&gt; 750

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 750

Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu

1	5	10	15
Leu Val Arg Pro Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val			
20	25	30	
Asn Lys Asp Ile Phe Glu Val Glu Glu Asn Thr Asn Val Thr Glu Pro			
35	40	45	
Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala			
50	55	60	
Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu			
65	70	75	80
Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu			
85	90	95	
Leu Cys Gln Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val			
100	105	110	
Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr			
115	120	125	
Lys Glu Ile Arg Val Glu Glu Asp Thr Lys Val Asn Ser Thr Val Ile			
130	135	140	
Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu			
145	150	155	160
Phe Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Asp Tyr Phe Ser			
165	170	175	
Leu Val Ser Val Asn Arg Pro Ala Leu Arg Leu Asp Arg Pro Leu Asp			
180	185	190	
Phe Tyr Glu Arg Pro Asn Met Thr Phe Trp Leu Leu Val Arg Asp Thr			
195	200	205	
Pro Gly Glu Asn Val Glu Pro Ser His Thr Ala Thr Ala Thr Leu Val			
210	215	220	
Leu Asn Val Val Pro Ala Asp Leu Arg Pro Pro Trp Phe Leu Pro Cys			
225	230	235	240
Thr Phe Ser Asp Gly Tyr Val Cys Ile Gln Ala Gln Tyr His Gly Ala			
245	250	255	
Val Pro Thr Gly His Ile Leu Pro Ser Pro Leu Val Leu Arg Pro Gly			
260	265	270	
Pro Ile Tyr Ala Glu Asp Gly Asp Arg Gly Ile Asn Gln Pro Ile Ile			
275	280	285	
Tyr Ser Ile Phe Arg Gly Asn Val Asn Gly Thr Phe Ile Ile His Pro			
290	295	300	
Asp Ser Gly Asn Leu Thr Val Ala Arg Ser Val Pro Ser Pro Met Thr			
305	310	315	320
Phe Leu Leu Leu Val Lys Gly Gln Gln Ala Asp Leu Ala Arg Tyr Ser			
325	330	335	
Val Thr Gln Val Thr Val Glu Gly Cys Gly Cys Gly Arg Glu Pro Ala			
340	345	350	
Pro Leu Pro Pro Glu Pro Val Ser Trp His Arg Gly Ala Trp Arg Trp			
355	360	365	
Ser Gly Arg Cys Gly Gln Gly Cys Ser Cys Pro Phe Ser Ala Ser Glu			
370	375	380	
Asp			
385			

&lt;210&gt; 751

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 751

cgcgctcgcg tcacgtcaaa cgacatgagc gaggtcaaca tcgacgcggc gctggtggcg  
60  
gcaggcggcg ggctgtcgcg caccgaggag aagctcgctg agatgtcgaa cggtgcacg  
120  
tgctgcacgc tgcgcgacga cctgatgcag gaagtggcga gactggcggg cgaaggccgc  
180  
ttcgatgcgc tggtcacga gagcaccggc gtgtccgagc cgatgccggt cggccccacg  
240  
ttcgatttcc gtgaccagga cggcgtctcg ctccgcgacg tcgcgcggtt ggataccatg  
300  
gtcacgctcg tcgacgcgc gtccttcctg cgcgactacg gctcg  
345

&lt;210&gt; 752

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 752

Arg	Val	Ala	Val	Ile	Val	Asn	Asp	Met	Ser	Glu	Val	Asn	Ile	Asp	Ala
1				5					10					15	
Ala	Leu	Val	Ala	Ala	Gly	Gly	Gly	Leu	Ser	Arg	Thr	Glu	Glu	Lys	Leu
			20					25					30		
Val	Glu	Met	Ser	Asn	Gly	Cys	Ile	Cys	Cys	Thr	Leu	Arg	Asp	Asp	Leu
		35				40						45			
Met	Gln	Glu	Val	Ala	Arg	Leu	Ala	Gly	Glu	Gly	Arg	Phe	Asp	Ala	Leu
		50				55					60				
Val	Ile	Glu	Ser	Thr	Gly	Val	Ser	Glu	Pro	Met	Pro	Val	Ala	Ala	Thr
65					70				75					80	
Phe	Asp	Phe	Arg	Asp	Gln	Asp	Gly	Val	Ser	Leu	Ala	Asp	Val	Ala	Arg
			85					90					95		
Leu	Asp	Thr	Met	Val	Thr	Val	Val	Asp	Ala	Ala	Ser	Phe	Leu	Arg	Asp
			100					105					110		
Tyr	Gly	Ser													
		115													

&lt;210&gt; 753

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 753

gcgcgccagt acgccaagac cgtccgcaag gaccgcaagg gcgaacggcg gcgtcggggc  
60  
gcgtcggact agtccacgat gcatccgaac cgcgccttcc gctttgccga tgatgtctcg  
120  
atgctcgatt tcgcggccaa gcgagccttt gcgcacatct tcgtgagcac gcccgagggg  
180  
cctatggtag cgcattgccc ggttacgccc ttcgacggag ccttcgctt ccatgtcgcg  
240  
cgcgccaatc ggatcgcgcg gcacctggat ggcgcgacgc tgctgctcag catcagcgcg  
300



accgacggct atatcagccc gagctggtac gccgacccgc agggaccaca gt  
352

<210> 754  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 754  
Met His Pro Asn Arg Ala Phe Arg Phe Ala Asp Asp Val Ser Met Leu  
1 5 10 15  
Asp Phe Ala Ala Lys Arg Ala Phe Ala His Ile Phe Val Ser Thr Pro  
20 25 30  
Glu Gly Pro Met Val Ala His Ala Pro Val Thr Pro Phe Asp Gly Ala  
35 40 45  
Phe Arg Phe His Val Ala Arg Gly Asn Arg Ile Ala Arg His Leu Asp  
50 55 60  
Gly Ala Thr Leu Leu Leu Ser Ile Ser Ala Thr Asp Gly Tyr Ile Ser  
65 70 75 80  
Pro Ser Trp Tyr Ala Asp Pro Gln Gly Pro Gln  
85 90

<210> 755  
<211> 301  
<212> DNA  
<213> Homo sapiens

<400> 755  
tgggatgcag ggtctttctt ctccaaggat ttcattcctg gagggagaaa agggccccag  
60  
ctgtctgccca tcaaaccggg ttgccgggct ggagctcctc ccaggcccgt gtgaggaaga  
120  
gcaaaggccg gcaggggctc gatgggacca gtcgctcgct caggcccagg aaaaccacac  
180  
agctgggggc tgtcaggatt ggaccagggt caggccggcc aggcgatggc gggaaaagca  
240  
ggcccactct gcagacctca atgtctcagg tgcactgcag ggcaaccccg cctaccccg  
300  
g  
301

<210> 756  
<211> 99  
<212> PRT  
<213> Homo sapiens

<400> 756  
Met Gln Gly Leu Ser Ser Pro Arg Ile Ser Phe Leu Glu Gly Glu Lys  
1 5 10 15  
Gly Pro Ser Cys Leu Pro Ser Asn Arg Val Ala Gly Leu Glu Leu Leu  
20 25 30  
Pro Gly Pro Cys Glu Glu Glu Gln Arg Pro Ala Gly Ala Arg Trp Asp  
35 40 45  
Gln Ser Leu Ala Gln Ala Gln Glu Asn His Thr Ala Gly Gly Cys Gln

50		55		60
Asp Trp Thr Arg Val Arg Pro Ala Arg Arg Trp Arg Glu Lys Gln Ala				
65	70	75	80	
His Ser Ala Asp Leu Asn Val Ser Gly Ala Leu Gln Gly Asn Pro Ala				
	85	90	95	
Tyr Pro Gly				

&lt;210&gt; 757

&lt;211&gt; 311

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 757

actgaggcga tcgccagagg ggtgggctg cgagggctgc tcaacatcca gtccgacctg  
60  
gtctccgatg ttctctatct catcgaggcc aacccaggg catcgcgcac agtccccctc  
120  
gtctcaaagg catccggcgt gcagctcgcc aaagcggcgg ccctcatcat gacagggggag  
180  
acgatcgctt cgctcaggcg ctccggccac ctgcccaggg ccgacgccgc cgtcaccgat  
240  
cccgatgacc cgatcgccgt caaggaggcg gtcctaccct tcaaacgatt ccgcaccacc  
300  
gagggacgcy t  
311

&lt;210&gt; 758

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 758

Thr Glu Ala Ile Ala Arg Gly Val Gly Val Arg Gly Leu Leu Asn Ile				
1	5	10	15	
Gln Phe Ala Leu Val Ser Asp Val Leu Tyr Val Ile Glu Ala Asn Pro				
	20	25	30	
Arg Ala Ser Arg Thr Val Pro Phe Val Ser Lys Ala Ser Gly Val Gln				
	35	40	45	
Leu Ala Lys Ala Ala Ala Leu Ile Met Thr Gly Glu Thr Ile Ala Ser				
	50	55	60	
Leu Arg Arg Ser Gly His Leu Pro Glu Ala Asp Ala Ala Val Thr Asp				
65	70	75	80	
Pro Asp Asp Pro Ile Ala Val Lys Glu Ala Val Leu Pro Phe Lys Arg				
	85	90	95	
Phe Arg Thr Thr Glu Gly Arg				
	100			

&lt;210&gt; 759

&lt;211&gt; 391

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 759

gtgcacaccg gcaagctggt gtggaactgg gacagcggca acccggacga cactacgccg  
60  
attgccgagg gcaagaccta caccgcaac tcgccgaaca tgtggtccat gttcgccgtc  
120  
gacgaaaaac tcggcatgct ctacctgccg atgggcaacc agaccccgga ccagttcggg  
180  
ggctaccgca cgctgcgtc ggaactgcac gctgccggcc tgacagcgct ggatatcgac  
240  
actggtaaag tgcgctggca ctaccagttc acccaccatg acctgtggga catggacgtg  
300  
ggcggccagc cgagcctgat cgacatcaag accgccgccg gcgtgaaaca agccgtgatg  
360  
gcctcgacca agcaaggcag catctacgcg t  
391

<210> 760

<211> 130

<212> PRT

<213> Homo sapiens

<400> 760

Val	His	Thr	Gly	Lys	Leu	Val	Trp	Asn	Trp	Asp	Ser	Gly	Asn	Pro	Asp
1				5				10						15	
Asp	Thr	Thr	Pro	Ile	Ala	Glu	Gly	Lys	Thr	Tyr	Thr	Arg	Asn	Ser	Pro
			20					25					30		
Asn	Met	Trp	Ser	Met	Phe	Ala	Val	Asp	Glu	Lys	Leu	Gly	Met	Leu	Tyr
		35					40					45			
Leu	Pro	Met	Gly	Asn	Gln	Thr	Pro	Asp	Gln	Phe	Gly	Gly	Tyr	Arg	Thr
	50					55					60				
Pro	Ala	Ser	Glu	Leu	His	Ala	Ala	Gly	Leu	Thr	Ala	Leu	Asp	Ile	Asp
65					70					75				80	
Thr	Gly	Lys	Val	Arg	Trp	His	Tyr	Gln	Phe	Thr	His	His	Asp	Leu	Trp
				85					90					95	
Asp	Met	Asp	Val	Gly	Gly	Gln	Pro	Ser	Leu	Ile	Asp	Ile	Lys	Thr	Ala
			100					105					110		
Ala	Gly	Val	Lys	Gln	Ala	Val	Met	Ala	Ser	Thr	Lys	Gln	Gly	Ser	Ile
		115					120					125			
Tyr	Ala														
	130														

<210> 761

<211> 324

<212> DNA

<213> Homo sapiens

<400> 761

cctaggtagg cccaaagggg cctaactttc ttgctgccct ggtggagcaa gaaatatctt  
60  
ctaggagagg ccaatccttc cctgccccac agctccttct ctgcaaagct caggggggcaa  
120  
tcaggtacct cctgccaag agggcccat ggttcctcgc ctaaggaagg cagggcgggg  
180  
cattgggagc cgttgacagc tgggctcagc tggggggagg ggtcagtttg ggagcaggtg  
240

cagatttcag ggaggggggg gcctaaaggg aagtagggat cttggtaggc tgcaaaattt  
 300  
 tcctcccat ccccatcca caga  
 324

<210> 762  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 762  
 Met Gly Asp Gly Glu Glu Asn Phe Ala Ala Tyr Gln Asp Pro Tyr Phe  
 1 5 10 15  
 Pro Leu Gly Pro Pro Leu Pro Glu Ile Cys Thr Cys Ser Gln Thr Asp  
 20 25 30  
 Pro Ser Pro Gln Leu Ser Pro Ala Val Asn Gly Ser Gln Cys Pro Ala  
 35 40 45  
 Leu Pro Ser Leu Gly Glu Glu Pro Trp Gly Pro Leu Gly Gln Glu Val  
 50 55 60  
 Pro Asp Cys Pro Leu Ser Phe Ala Glu Lys Glu Leu Trp Gly Arg Glu  
 65 70 75 80  
 Gly Leu Ala Ser Pro Arg Arg Tyr Phe Leu Leu His Gln Gly Ser Lys  
 85 90 95  
 Lys Val Arg Pro Leu Trp Ala Tyr Leu  
 100 105

<210> 763  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

<400> 763  
 acgcgttatg ggcggcccg atgggcgatg cgctatccca cacctcgatg atggcggaca  
 60  
 tcctcggcgg tgtgctggaa gtggcgcca atatcgcat tactgcgggc gcgaccgctg  
 120  
 ccgcggtggc cgccaccggc ttaccgagg ccaccggcgg cctcggctgc ttctgctgg  
 180  
 gcgctgcctt gggcaccatt gccggcctgg ccatgagcaa cattggcgcg gacacagggc  
 240  
 tgaccaagat atgcaatgcc ttttaacaacg cttatttgc gccaccgtg catgcgaaca  
 300  
 t  
 301

<210> 764  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 764  
 Met Phe Ala Cys Thr Val Gly Ala Asn Lys Ala Leu Leu Lys Ala Leu  
 1 5 10 15  
 His Ile Leu Val Ser Pro Val Ser Ala Pro Met Leu Leu Met Ala Arg



[illegible]

<210> 767

<211> 431

<212> DNA

<213> Homo sapiens

<400> 767

gctagctcgc tcgcactcat tctcgggagg cttccccgcg ccggccgcgt cccgcccgct  
60

ccccggcacc agaagttcct ctgcgcgtcc gacggcgaca tgggcgtccc cacggccccg  
120

gaggccggca gctggcgctg gggatccctg ctcttcgctc tcttcctggc tgcgtcccta  
180

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 <213> Homo sapiens

<400> 768  
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 35 40 45  
 Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His  
 50 55 60  
 Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val  
 65 70 75 80  
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<210> 769  
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 <212> DNA  
 <213> Homo sapiens

<400> 769  
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 180  
 aaaaatcccc ggtcggccca caaataaatc aattgcgccg ctctccgag ttcttccatg  
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 422

<210> 770  
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 <213> Homo sapiens

<400> 770  
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<210> 771

<211> 369

<212> DNA

<213> Homo sapiens

<400> 771

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<210> 772

<211> 123

<212> PRT

<213> Homo sapiens

<400> 772

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Pro	His	Gly	Val	Cys	Asn	Ala	Ile	Leu	Leu	Pro	His	Val	Gln	Thr	Phe
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Gly	Val	Asp	Val	Ser	Gln	Met	Thr	Ala	Glu	Gln	Gly	Ala	Gln	Ala	Cys
65				70					75					80	
Ile	Ala	Glu	Ile	Arg	Ser	Leu	Ala	Arg	Gln	Val	Asn	Ile	Pro	Val	Gly
			85						90				95		
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115

120

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 <213> Homo sapiens

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<210> 774  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 774  
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 Pro Glu Phe Thr Leu Glu Asn Ala Ser Gly Ser Cys Arg Asp Ser Ala  
 35 40 45  
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 Val Ser Gly Tyr Leu Ile Gln Leu Thr Ala Asp Val Lys Ala Leu Asp  
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<210> 775  
 <211> 4125  
 <212> DNA  
 <213> Homo sapiens

<400> 775  
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<210> 776

<211> 483

<212> PRT

<213> Homo sapiens

<400> 776

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Ala	Leu	Ile	Cys	Pro	Pro	Asn	Leu	Pro	Gly	Phe	Gln	Asn	Gly	Arg	Gly
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Ser	Ser	Thr	Ser	Ser	Ser	Ser	Ile	Thr	Gly	Glu	Thr	Val	Ala	Met	Val
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His	Ser	Pro	Pro	Pro	Thr	Arg	Leu	Thr	His	Pro	Leu	Ile	Arg	Leu	Ala
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Ser	Arg	Pro	Gln	Lys	Asp	Gln	Ala	Ser	Ile	Asp	Arg	Leu	Pro	Asp	His
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Cys	Ala	Arg	Val	Cys	Arg	Arg	Trp	Tyr	Asn	Leu	Ala	Trp	Asp	Pro	Arg
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Leu	Trp	Arg	Thr	Ile	Arg	Leu	Thr	Gly	Glu	Thr	Ile	Asn	Val	Asp	Arg
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Cys	Leu	Met	Leu	Glu	Thr	Val	Thr	Val	Ser	Gly	Cys	Arg	Arg	Leu	Thr

			180				185				190				
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Leu	Glu	Val	Ser	Gly	Cys	Tyr	Asn	Ile	Ser	Asn	Glu	Ala	Val	Phe	Asp
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Val	Val	Ser	Leu	Cys	Pro	Asn	Leu	Glu	His	Leu	Asp	Val	Ser	Gly	Cys
			225				230				235				
Ser	Lys	Val	Thr	Cys	Ile	Ser	Leu	Thr	Arg	Glu	Ala	Ser	Ile	Lys	Leu
			245				250				255				
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Cys	Thr	Gln	Leu	Thr	His	Leu	Tyr	Leu	Arg	Arg	Cys	Val	Arg	Leu	Thr
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Ile	Ala	Lys	Leu	Glu	Ser	Arg	Leu	Arg	Tyr	Leu	Ser	Ile	Ala	His	Cys
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Gly	Arg	Val	Thr	Asp	Val	Gly	Ile	Arg	Tyr	Val	Ala	Lys	Tyr	Cys	Ser
			355				360				365				
Lys	Leu	Arg	Tyr	Leu	Asn	Ala	Arg	Gly	Cys	Glu	Gly	Ile	Thr	Asp	His
			370				375				380				
Gly	Val	Glu	Tyr	Leu	Ala	Lys	Asn	Cys	Thr	Lys	Leu	Lys	Ser	Leu	Asp
			385				390				395				
Ile	Gly	Lys	Cys	Pro	Leu	Val	Ser	Asp	Thr	Gly	Leu	Glu	Cys	Leu	Ala
			405				410				415				
Leu	Asn	Cys	Phe	Asn	Leu	Lys	Arg	Leu	Ser	Leu	Lys	Ser	Cys	Glu	Ser
			420				425				430				
Ile	Thr	Gly	Gln	Gly	Leu	Gln	Ile	Val	Ala	Ala	Asn	Cys	Phe	Asp	Leu
			435				440				445				
Gln	Thr	Leu	Asn	Val	Gln	Asp	Cys	Glu	Val	Ser	Val	Glu	Ala	Leu	Arg
			450				455				460				
Phe	Val	Lys	Arg	His	Cys	Lys	Arg	Cys	Val	Ile	Glu	His	Thr	Asn	Pro
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<210> 777

<211> 705

<212> DNA

<213> Homo sapiens

<400> 777

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<210> 778  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 778  
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 65 70 75 80  
 Pro Pro Ile Ser Gly Lys Asn Leu Arg Gln Met Ser Lys Asp Tyr Gln  
 85 90 95  
 Gln Val Leu Leu Asp Val Arg Arg Ser Leu Arg Arg Phe Pro Pro Gly  
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<210> 779  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

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<210> 780  
 <211> 105  
 <212> PRT  
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<400> 780  
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 35 40 45  
 Ala Arg Pro Ser Lys Tyr Glu Ser Pro Asn Ala Ser Asn Phe Ile Val  
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 Arg His Val Ala Thr Gly Lys Glu Gly Thr Asp Asp Glu Tyr Ala Asn  
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<210> 781  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

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<210> 782  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 782  
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Cys Leu Cys Val Arg Asn Val Cys Val Trp Asn Val Phe Thr Cys Met
65          70          75          80
Cys Leu Glu Cys Val Cys Met Glu Cys Val Cys Met Cys Met Xaa Met
          85          90          95
Cys Val Cys

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&lt;210&gt; 783

&lt;211&gt; 612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 783

```

accggtgacg taactgctcc cgctggcagc ttcgagggcg atgtcgattt gcgtgcccgg
60
caccgggtcg agtgagctgc ccagcagcaa gcccaccaca tcggtgacca gaccgatcac
120
tttgttgagc acgtcgatga cgggcaactt caaggaaatc caggtgcgga cttgcgcggt
180
ccgcacaaaa atcggctggg tgtcgatcaa ctgcggggtg ccaatcgag aatttgcgcg
240
gttcgatgac acgtgtcttc accgtgatat tcagcagccc cagtacgtcc accggcaact
300
cgacggccac cgcgtgggt ttgttgga gctgcacaaa gccctgaatc aggttgaaca
360
gttgacaggt gacgtccagg gcgctcttgt ccgtgccgtt ttgtatattg atcaggtcgc
420
ccaggtgcag gatctgcgtg cctggggcaa tcagcttgat tgcttcgagg ttattgatca
480
ccacctggac cgcattaccg ccagcttga gcacatcgat ggcggcctgg atcaactggc
540
cgacggtcgc gtcggtcttg agcaactggc cgtagttgcc ggcgctgacg ttgaggcgga
600
tggccgacgc gt
612

```

&lt;210&gt; 784

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 784

```

Met Ser Ile Cys Val Pro Gly Thr Gly Ser Ser Glu Leu Pro Ser Ser
1          5          10          15
Lys Pro Thr Thr Ser Val Thr Arg Pro Ile Thr Leu Leu Ser Thr Ser
          20          25          30
Met Thr Gly Asn Phe Lys Glu Ile Gln Val Arg Thr Cys Ala Val Arg
          35          40          45
Thr Lys Ile Gly Trp Val Ser Ile Asn Cys Gly Leu Pro Ile Ala Glu

```



50		55		60	
Phe	Ala	Arg	Phe	Asp	Asp
65		70		75	
Gln	Tyr	Val	His	Arg	Gln
		85		90	
Gln	Leu	His	Lys	Ala	Leu
		100		105	
Gln	Gly	Ala	Leu	Val	Arg
		115		120	
Val	Gln	Asp	Leu	Arg	Ala
		130		135	
Ile	Asp	His	His	Leu	Asp
145		150		155	
Gly	Gly	Leu	Asp	Gln	Leu
		165		170	
Val	Val	Val	Ala	Gly	Ala
		180		185	

&lt;210&gt; 785

&lt;211&gt; 408

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 785

accttggact acttcactat cgaccctcgg ctaggcgacg acgatgactt cgatcacctg  
60  
cttcaggccg cccacgctcg tggctctgtca gtactgctcg acggggtggt caaccacgtc  
120  
tcgcgtcgca accgcatcgt gcaggatgcg cagagtgtcg ggccagattc agacgccggc  
180  
cgtatgggttc gctggtgtga ggggcgcctc gacgttttcg agggtcatag tgacctggtc  
240  
gcactcaacc acgacaaccc cgcagtgcgg gaacatgtca cccggatcat gaactattgg  
300  
tgcggtcgcg gtgttgacgg ctggcggctg gacgccgcta ttccgtcaat cctgagttct  
360  
gggctgcggg gctgcctccg gtgcgagaga agcgcctga cgtgagga  
408

&lt;210&gt; 786

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 786

Thr	Leu	Asp	Tyr	Phe	Thr	Ile	Asp	Pro	Arg	Leu	Gly	Asp	Asp	Asp	Asp
1				5				10						15	
Phe	Asp	His	Leu	Leu	Gln	Ala	Ala	His	Ala	Arg	Gly	Leu	Ser	Val	Leu
			20					25					30		
Leu	Asp	Gly	Val	Val	Asn	His	Val	Ser	Arg	Arg	Asn	Arg	Ile	Val	Gln
		35					40				45				
Asp	Ala	Gln	Ser	Ala	Gly	Pro	Asp	Ser	Asp	Ala	Gly	Arg	Met	Val	Arg
	50					55				60					
Trp	Cys	Glu	Gly	Arg	Leu	Asp	Val	Phe	Glu	Gly	His	Ser	Asp	Leu	Val

```

65              70              75              80
Ala Leu Asn His Asp Asn Pro Ala Val Arg Glu His Val Thr Arg Ile
              85              90              95
Met Asn Tyr Trp Cys Gly Arg Gly Val Asp Gly Trp Arg Leu Asp Ala
              100              105              110
Ala Ile Pro Ser Ile Leu Ser Ser Gly Leu Arg Cys Cys Leu Arg Cys
              115              120              125
Glu Arg Ser Ala Leu Thr
              130

```

<210> 787  
 <211> 310  
 <212> DNA  
 <213> Homo sapiens

```

<400> 787
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120
ccttgggtctc tcttcattgc tgccgtcact gtgtgctggg catgccctgc agttacccca
180
aagcttttatg tcacaacatt gaggctggcg gagaaagacc ggcccccttca cccacctta
240
gacttcctgg aaggggccgcc cgggtccaca acctggccccg ttaactccct gggcagctgc
300
tggggggagaa
310

```

<210> 788  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

```

<400> 788
Met Met Leu Val Ala Asp Thr Val Gly Thr Thr Asp Asp Ala Thr Leu
1      5      10      15
Val Ser Ala Val Arg His Trp Pro Thr Trp Arg Pro Trp Ser Leu Leu
20     25     30
Ile Ala Ala Val Thr Val Cys Trp Ala Cys Pro Ala Val Thr Pro Lys
35     40     45
Leu Tyr Val Thr Thr Leu Arg Leu Ala Glu Lys Asp Arg Pro Leu His
50     55     60
Pro Thr Leu Asp Phe Leu Glu Gly Pro Pro Gly Ser Thr Thr Trp Pro
65     70     75     80
Val Asn Ser Leu Gly Ser Cys Trp Gly Arg
85     90

```

<210> 789  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 789

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 tctgccagac agcagcgctg ggacctctcc cctccccagc aggatgggcc ggctctggaa  
 120  
 gcacgaggtg ttccaaagtg caaacaagct gctgttaaata aattattccc aaacgccaaa  
 180  
 gcccttgctg gtttgcttgc ttgctttttt ctttttttgc ctgcacaga tatcgctagg  
 240  
 gcagagtatt gacatttcgt tttctttttg ttatgggtga taaagcacgg tgtttcttgt  
 300  
 gagtgtatgc ctgtatttcc ctgcagagct gattgccagt ccattttctt ctatcccatc  
 360  
 cccattttc  
 369

<210> 790

<211> 114

<212> PRT

<213> Homo sapiens

<400> 790

Met	Asp	Trp	Gln	Ser	Ala	Leu	Gln	Gly	Asn	Thr	Gly	Ile	His	Ser	Gln
1				5				10						15	
Glu	Thr	Pro	Cys	Phe	Ile	Thr	His	Asn	Lys	Lys	Lys	Thr	Lys	Cys	Gln
			20					25					30		
Tyr	Ser	Ala	Leu	Ala	Ile	Ser	Val	Arg	Gly	Lys	Lys	Arg	Lys	Lys	Gln
		35				40						45			
Ala	Ser	Lys	Pro	Ala	Arg	Ala	Leu	Ala	Phe	Gly	Asn	Asn	Tyr	Leu	Thr
	50					55				60					
Ala	Ala	Cys	Leu	His	Phe	Gly	Thr	Pro	Arg	Ala	Ser	Arg	Ala	Gly	Pro
65				70				75						80	
Ser	Cys	Trp	Gly	Gly	Glu	Arg	Ser	Gln	Arg	Cys	Cys	Leu	Ala	Asp	Leu
			85					90						95	
Gly	Phe	Gly	Gly	His	Gln	Lys	Arg	Gly	Arg	Leu	Leu	Ala	Ala	Ala	Thr
			100					105						110	
Ser	Arg														

<210> 791

<211> 420

<212> DNA

<213> Homo sapiens

<400> 791

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 ggtcttccag ttcttggtgt gaaatgggtat cgaaataaat ctttactaga gccagatgaa  
 120  
 agaatcaaaa tggaaagagt gggtaatgtg tgttcactgg aaatttctaa cattcaaaaa  
 180  
 ggagaagggg gagagtacat gtgtcatgct gtaaacaatca taggggaagc aaagagcttt  
 240  
 gcaaatgtag acataatgcc ccaggaagaa agagtgggtg cactaccacc tccagtaaca  
 300

catcagcatg tcattggagtt tgatttggaa cacaccacat catcaagaac accttctcct  
 360  
 caagaaattg tcctggaagt tgaattaagt gaaaaagacg ttaaagaatt tgagaagcag  
 420

<210> 792  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 792  
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 Val Glu Gly Leu Pro Val Pro Gly Val Lys Trp Tyr Arg Asn Lys Ser  
 20 25 30  
 Leu Leu Glu Pro Asp Glu Arg Ile Lys Met Glu Arg Val Gly Asn Val  
 35 40 45  
 Cys Ser Leu Glu Ile Ser Asn Ile Gln Lys Gly Glu Gly Gly Glu Tyr  
 50 55 60  
 Met Cys His Ala Val Asn Ile Ile Gly Glu Ala Lys Ser Phe Ala Asn  
 65 70 75 80  
 Val Asp Ile Met Pro Gln Glu Glu Arg Val Val Ala Leu Pro Pro Pro  
 85 90 95  
 Val Thr His Gln His Val Met Glu Phe Asp Leu Glu His Thr Thr Ser  
 100 105 110  
 Ser Arg Thr Pro Ser Pro Gln Glu Ile Val Leu Glu Val Glu Leu Ser  
 115 120 125  
 Glu Lys Asp Val Lys Glu Phe Glu Lys Gln  
 130 135

<210> 793  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

<400> 793  
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 ccgcgaacag tactgcggga acccaaacga tcatttttaa cccagacgt ccctgaacca  
 120  
 aagccaaagt ctacaggtca ctggggcaga ggccgcccga aaccagcttc ccctcccggc  
 180  
 ctaggcgcg caggtccccg ccagccggg gcgatccttt ggtcggacag tgaggttggg  
 240  
 agcccaccgc acccaagtcc gccgcattca cccggcgag ggcacccccg acgggcagcc  
 300  
 gctcaccttc tcctggcccc ggcttcagga aaactgcctg gaggtggccg gggttcccta  
 360  
 gcggaggtctg ggcggggggc ttgcgcctg cctcagtctc cccatccgtg gcccggggga  
 420  
 tggagcccg tgcgcgaga ggctgcggca ggtccagcc aggtgcctg gaacgtgga  
 479

<210> 794

<211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 794

Xaa	Ala	Cys	Arg	Phe	Ser	Glu	Ile	His	Tyr	Gly	Asn	Val	Arg	Val	Val
1				5					10				15		
Glu	Met	Leu	Arg	Pro	Arg	Thr	Val	Leu	Arg	Glu	Pro	Lys	Arg	Ser	Phe
			20					25				30			
Leu	Thr	Pro	Asp	Val	Pro	Glu	Pro	Lys	Pro	Lys	Ser	Thr	Gly	His	Trp
		35					40					45			
Gly	Arg	Gly	Arg	Pro	Lys	Pro	Ala	Ser	Pro	Pro	Gly	Leu	Gly	Ala	Pro
		50				55					60				
Gly	Pro	Arg	Pro	Ala	Gly	Ala	Ile	Leu	Trp	Ser	Asp	Ser	Glu	Val	Gly
65					70					75				80	
Ser	Pro	Pro	His	Pro	Ser	Pro	Pro	His	Pro	Pro	Gly	Ala	Gly	Asp	Pro
			85					90					95		
Arg	Arg	Ala	Ala	Ala	His	Leu	Leu	Leu	Ala	Pro	Ala	Ser	Gly	Lys	Leu
			100					105					110		
Pro	Gly	Gly	Gly	Arg	Gly	Ser	Leu	Ala	Glu	Ala	Gly	Arg	Arg	Ala	Ser
		115					120					125			
Arg	Leu	Pro	Gln	Ser	Pro	His	Pro	Trp	Pro	Gly	Gly	Trp	Ser	Pro	Leu
	130					135					140				
Arg	Ala	Glu	Ala	Ala	Ala	Gly	Pro	Ser	Gln	Val	Pro	Trp	Asn	Val	
145					150						155				

<210> 795  
 <211> 1418  
 <212> DNA  
 <213> Homo sapiens

<400> 795

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ccggactacg aggcgctgcc ggctggagcc actgtcacca cgcacatggt ggcaggcgcc
120
gtggcaggga tcctggagca ctgcgtgatg taccccatcg actgcgtcaa gacccgatg
180
cagagtctac agcctgaccc agctgccgcg tatcgcaatg tgttggaggc cctctggagg
240
attataagaa cggagggcct atggaggccc atgagggggc tgaacgtcac agcaacaggc
300
gcagggcctg cccacgcctt ttattttgcc tgctacgaaa agttaaaaaa gacattgagt
360
gatgtaatcc accctggggg caatagccat attgccaatg gtgcggccgg gtgtgtggca
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480
tgaatctgga tactctccat caccggttgg ctgctgtcac catttcttc ctggttgatg
540
gcactactag tggtaagca gaggatgcag atgtacaact caccatacca cggggtgaca
600
gactgtgtac gggcagtggt gcaaaatgaa ggggccgggg ccttttaccg cagctacacc
660

```

acccagctga ccatgaacgt tcctttccaa gccattcact tcatgaccta tgaattcctg  
 720  
 caggagcact ttaacccccca gagacggtac aacccaagct cccacgtcct ctctggagct  
 780  
 tgcgcaggag ctgtagctgc cgcagccaca accccactgg acgtttgcaa aacactgctc  
 840  
 aacacccagg agtccttggc tttgaactca cacattacag gacatatcac aggcatggct  
 900  
 agtgccttca ggacggtata tcaagtaggt ggggtgaccg cctatttccg aggggtgcag  
 960  
 gccagagtaa tttaccagat ccctccaca gccatcgcat ggtctgtgta tgagttcttc  
 1020  
 aaatacctaa tcactaaaag gcaagaagag tggagggctg gcaagtgaag tagcactgaa  
 1080  
 cgaagccagg ggttcagatg acactgctgc atcctgggtca cattctctgt ctctggaat  
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 1200  
 ttttgactaa caccagttcc tgccaacctc tgttgccacc acctttcctt ccaggcccta  
 1260  
 agcacgtgca gcaaagcaca ccacagcacc tttgataacc tctctccatc ctgggcctga  
 1320  
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 1380  
 agcctttaa ttaaaaaaaaa aaaaaaaaaa aaaaaaaa  
 1418

&lt;210&gt; 796

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 796

Met	Ala	Leu	Leu	Val	Val	Lys	Gln	Arg	Met	Gln	Met	Tyr	Asn	Ser	Pro
1			5						10					15	
Tyr	His	Arg	Val	Thr	Asp	Cys	Val	Arg	Ala	Val	Trp	Gln	Asn	Glu	Gly
		20						25					30		
Ala	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Val
		35					40				45				
Pro	Phe	Gln	Ala	Ile	His	Phe	Met	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	His
	50					55					60				
Phe	Asn	Pro	Gln	Arg	Arg	Tyr	Asn	Pro	Ser	Ser	His	Val	Leu	Ser	Gly
65				70					75					80	
Ala	Cys	Ala	Gly	Ala	Val	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val
			85					90					95		
Cys	Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Ser	Leu	Ala	Leu	Asn	Ser	His
		100					105					110			
Ile	Thr	Gly	His	Ile	Thr	Gly	Met	Ala	Ser	Ala	Phe	Arg	Thr	Val	Tyr
	115					120					125				
Gln	Val	Gly	Gly	Val	Thr	Ala	Tyr	Phe	Arg	Gly	Val	Gln	Ala	Arg	Val
	130					135				140					
Ile	Tyr	Gln	Ile	Pro	Ser	Thr	Ala	Ile	Ala	Trp	Ser	Val	Tyr	Glu	Phe
145				150					155					160	
Phe	Lys	Tyr	Leu	Ile	Thr	Lys	Arg	Gln	Glu	Glu	Trp	Arg	Ala	Gly	Lys

165

170

175

&lt;210&gt; 797

&lt;211&gt; 585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 797

```

aaatttaccg gcggaacaaac ccacgtcacc gactacacca acgcctcgcg caccatgctc
60
ttcaacatcc acacgctgga gtgggatgcg aagatgctgg agattctcga cgtgccgcgc
120
gagatgctgc cggaagttaa gtcgtcttca gaaatctacg gccgcaccaa aagcggatc
180
gctatcgggc gcatcgcggg cgaccaacag gctgctctgt tcggccagat gtgctggaa
240
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300
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360
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480
gacagcaacg gcgtctacct ggtgccggcc tttaccggcc tgggcgctcc gtactgggac
540
ccgtatgccc gtggcgcttt gtttggcctg actcgtggcg tacgc
585

```

&lt;210&gt; 798

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 798

```

Lys Phe Thr Gly Gly Lys Thr His Val Thr Asp Tyr Thr Asn Ala Ser
1           5           10           15
Arg Thr Met Leu Phe Asn Ile His Thr Leu Glu Trp Asp Ala Lys Met
20           25           30
Leu Glu Ile Leu Asp Val Pro Arg Glu Met Leu Pro Glu Val Lys Ser
35           40           45
Ser Ser Glu Ile Tyr Gly Arg Thr Lys Ser Gly Ile Ala Ile Gly Gly
50           55           60
Ile Ala Gly Asp Gln Gln Ala Ala Leu Phe Gly Gln Met Cys Val Glu
65           70           75           80
Ala Gly Gln Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Leu Leu Met
85           90           95
Asn Thr Gly Asp Lys Ala Val Lys Ser Lys His Gly Met Leu Thr Thr
100          105          110
Ile Ala Cys Gly Pro Arg Gly Glu Val Ala Tyr Ala Leu Glu Gly Ala
115          120          125
Val Phe Asn Gly Gly Ser Pro Val Gln Trp Leu Arg Asp Glu Leu Lys
130          135          140
Ile Ile Ala Asp Ala Thr Asp Thr Glu Tyr Phe Ala Gly Lys Val Lys

```

145		150		155		160
Asp Ser Asn Gly Val Tyr Leu Val Pro Ala Phe Thr Gly Leu Gly Ala						
	165		170		175	
Pro Tyr Trp Asp Pro Tyr Ala Arg Gly Ala Leu Phe Gly Leu Thr Arg						
	180		185		190	
Gly Val Arg						
195						

&lt;210&gt; 799

&lt;211&gt; 2152

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 799

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60
caagtgtccc agcagcatga ctgaacatca ctcacttccc ctacttgatc tacaaggcca
120
acgccgagag cccagaccag gattccaaac aactgcacg agaatattgt ggatccgctg
180
tcaggtaagt gtccgtcact gaccagacg ctgttacgtg gcacatgact gtacagtgcc
240
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420
acaacgaata catacatctt aaaaaatgct ggggtgggccc aggcacagct caccgctgta
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720
tcgagatcac gccactgcac tccagcctgg cgacagagcg agactccatc tcaaaaaaaaa
780
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840
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900
cacgtgggga ggggcagtgg ccaggctcggc cttggacggg tacaccacct tcaggctccc
960
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1020
actgggattc gttgtgggat ctggaagttg tccagagact gcacggctt cagtatctga
1080
gagtgatcct tcctctttat tttctaaagt gtactttttc atttctgcca ttttcagaat
1140
gagggcatcc atgacatcct tgcaaatctg cagactgggtg gcacttgta cttccaaaaa
1200

```



caaatcagaa gtcgttttct taacctttgt cttctcactg ttggttattg gtgggaagga  
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 1320  
 aaggatatctg tgcaggcccg acacactctg ccgcttcttc tgcttctct gctcctcggc  
 1380  
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 1620  
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 1860  
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 1920  
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 1980  
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 2040  
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 2100  
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 2152

&lt;210&gt; 800

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 800

Cys	Cys	Asn	Asp	Asn	Ile	Ala	Ser	Leu	Tyr	Asp	Arg	Ile	Ile	Trp	Lys
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Asn	Arg	Thr	Thr	Asn	Thr	Tyr	Ile	Leu	Lys	Asn	Ala	Gly	Val	Gly	Gln
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Gly	Ser	Arg	Asn	Pro	Ser	Thr	Leu	Arg	Gly	Arg	Gly	Gly	Gln	Ile	Met
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Arg	Ser	Arg	Asp	Gln	Asp	His	Pro	Gly	Gln	Asn	Gly	Glu	Thr	Pro	Ser
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Leu	Leu	Lys	Ile	Gln	Lys	Leu	Ala	Glu	Leu	Ser	Gly	Thr	His	Leu	
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&lt;210&gt; 801

&lt;211&gt; 424

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 801

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420
atgn
424

```

&lt;210&gt; 802

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 802

```

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20           25           30
Ile Gly Pro Asn Gly Cys Gly Lys Ser Thr Leu Leu Ser His Leu Tyr
35           40           45
Arg Leu His Ser Thr Lys Asn Lys Ile Thr Leu Asn Gly Lys Pro Leu
50           55           60
Glu Ser Tyr Lys Gly Arg Glu Phe Ala Gln Leu Val Ala Val Leu Thr
65           70           75           80
Gln Ser Arg Asp Ala Met Ile Asp Asp Phe Leu Val Lys Asp Ile Val
85           90           95
Leu Met Gly Arg Asp Pro Tyr Lys Gln His Phe Gly Thr Tyr Ser Ser
100          105          110
Glu Asp Val Lys Ile Ala Glu His Tyr Met
115          120

```

&lt;210&gt; 803

&lt;211&gt; 6863

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 803

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<211> 1400

<212> PRT

<213> Homo sapiens

<400> 804

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Lys	Val	Thr	Ser	Ala	Cys	Gln	Ala	Leu	Pro	Pro	Val	Glu	Leu	Arg	Arg	65	70	75	80
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Phe</															



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		915					920					925				
Gln	Arg	Leu	Ser	Pro	Gly	Glu	Ala	Leu	Pro	Pro	Val	Ser	Gln	Ala	Gly	
	930					935					940					
Thr	Gly	Lys	Ala	Pro	Glu	Leu	Pro	Ser	Gly	Ser	Gly	Pro	Glu	Pro	Leu	
945					950					955					960	
Ala	Pro	Ser	Pro	Val	Ser	Pro	Thr	Phe	Pro	Pro	Ser	Ser	Pro	Ser	Asp	
				965					970						975	
Trp	Pro	Gln	Glu	Arg	Ser	Pro	Gly	Gly	His	Ser	Asp	Gly	Ala	Ser	Pro	
			980					985					990			
Arg	Ser	Pro	Val	Pro	Thr	Thr	Leu	Pro	Gly	Leu	Arg	His	Ala	Pro	Trp	
		995					1000					1005				
Gln	Gly	Pro	Arg	Gly	Pro	Pro	Asp	Ser	Pro	Asp	Gly	Ser	Pro	Leu	Thr	
	1010					1015					1020					
Pro	Val	Pro	Ser	Gln	Met	Pro	Trp	Leu	Val	Ala	Ser	Pro	Glu	Pro	Pro	
1025					1030					1035					1040	
Gln	Ser	Ser	Pro	Thr	Pro	Ala	Phe	Pro	Leu	Ala	Ala	Ser	Tyr	Asp	Thr	
				1045					1050					1055		
Asn	Gly	Leu	Ser	Gln	Pro	Pro	Leu	Pro	Glu	Lys	Arg	His	Leu	Pro	Gly	
			1060					1065			</					

1155	1160	1165
Leu Lys Val Ala Thr Pro Pro Pro Ser Ala Gln Pro Trp Lys Gly Asp		
1170	1175	1180
Pro Val Glu Gln Leu Val Arg His Phe Leu Ile Glu Thr Gly Pro Lys		
1185	1190	1195
Gly Val Lys Ile Lys Gly Cys Pro Ser Glu Pro Tyr Phe Gly Ser Leu		1200
1205	1210	1215
Ser Ala Leu Val Ser Gln His Ser Ile Ser Pro Ile Ser Leu Pro Cys		
1220	1225	1230
Cys Leu Arg Ile Pro Ser Lys Asp Pro Leu Glu Glu Thr Pro Glu Ala		
1235	1240	1245
Pro Val Pro Thr Asn Met Ser Thr Ala Ala Asp Leu Leu Arg Gln Gly		
1250	1255	1260
Ala Ala Cys Ser Val Leu Tyr Leu Thr Ser Val Glu Thr Glu Ser Leu		
1265	1270	1275
Thr Gly Pro Gln Ala Val Ala Arg Ala Ser Ser Ala Ala Leu Ser Cys		1280
1285	1290	1295
Ser Pro Arg Pro Thr Pro Ala Val Val His Phe Lys Val Ser Ala Gln		
1300	1305	1310
Gly Ile Thr Leu Thr Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His		
1315	1320	1325
Tyr Pro Val Asn Ser Ile Thr Phe Ser Ser Thr Asp Pro Gln Asp Arg		
1330	1335	1340
Arg Trp Thr Asn Pro Asp Gly Thr Thr Ser Lys Ile Phe Gly Phe Val		
1345	1350	1355
Ala Lys Lys Pro Gly Ser Pro Trp Glu Asn Val Cys His Leu Phe Ala		1360
1365	1370	1375
Glu Leu Asp Pro Asp Gln Pro Ala Gly Ala Ile Val Thr Phe Ile Thr		
1380	1385	1390
Lys Val Leu Leu Gly Gln Arg Lys		
1395	1400	

&lt;210&gt; 805

&lt;211&gt; 550

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 805

```

cccagagag gcttcaatcc aatgagctgc cagctgaact tactcaacaa gcaaggaccc
60
atgggcagac ccaggaaatc tcgccaagta cccattcat gggaggccag cagcacaatt
120
agtcattcat ttacttatca agctgttact gtgtgtgcaa gaagcgccag agagatgata
180
tcaaggagct cttaccatgg ctggcataga gcggctgatg agtaagttcc gtctgcacaa
240
agagtccecta agcattcatt cttggctgac attcttggct caggggggtct ccatggcctt
300
gttccccctcc tcgggtcacc agttcaggtc gagggggcct atgcttggaa gggccacacc
360
aatggacctt gccaggacac tcagtcacag gtttcacacc caaagagaag acagcccaac
420
ccagaccctc aaaagagagc acctggggga agggagcgtg gaaaccagga ctcagaaaga
480

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540

ctctgaaggc

550

<210> 806

<211> 118

<212> PRT

<213> Homo sapiens

<400> 806

Met	Ala	Gly	Ile	Glu	Arg	Leu	Met	Ser	Lys	Phe	Arg	Leu	His	Lys	Glu
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Ser	Leu	Ser	Ile	His	Ser	Trp	Leu	Thr	Phe	Leu	Ala	Gln	Gly	Val	Ser
			20					25					30		
Met	Ala	Leu	Phe	Pro	Ser	Ser	Gly	His	Gln	Phe	Arg	Ser	Arg	Gly	Pro
		35					40						45		
Met	Leu	Gly	Arg	Ala	Thr	Pro	Met	Asp	Leu	Ala	Arg	Thr	Leu	Ser	His
	50					55					60				
Arg	Phe	His	Thr	Gln	Arg	Glu	Asp	Ser	Pro	Thr	Gln	Thr	Leu	Lys	Arg
65					70					75					80
Glu	His	Leu	Gly	Glu	Gly	Ser	Val	Glu	Thr	Arg	Thr	Gln	Lys	Asp	Thr
			85						90					95	
Arg	Glu	Lys	Glu	Ala	Val	His	Trp	Gly	Gly	Phe	Arg	Gly	Thr	Cys	Ala
			100					105					110		
Cys	His	Val	Ser	Glu	Gly										
			115												

<210> 807

<211> 287

<212> DNA

<213> Homo sapiens

<400> 807

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cccagaggtgg gagagcgcgc ggcattggcga ccgtaaactgt atcgttgtcc gatgcgatga  
120  
ccgagtgggt cgaagctcag accgggacag gccgctatac cagcgcgagc gattatatct  
180  
gcgccctgat tcgccaggac caggagcgaa gcgacggcct caggcagctt caaacgttga  
240  
tcaccgaggg gttcgacagc ggcatcagcg cctcgtcgct tgatgac  
287

<210> 808

<211> 93

<212> PRT

<213> Homo sapiens

<400> 808

Met	Ala	Val	Ala	Leu	Pro	His	Trp	Gln	Asp	Ala	Lys	Phe	Leu	Ala	Met
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Ile	Ser	Arg	Gly	Gly	Arg	Ala	Arg	Gly	Met	Ala	Thr	Val	Asn	Val	Ser

				20					25					30			
Leu	Ser	Asp	Ala	Met	Thr	Glu	Trp	Val	Glu	Ala	Gln	Thr	Gly	Thr	Gly		
			35				40					45					
Arg	Tyr	Thr	Ser	Ala	Ser	Asp	Tyr	Ile	Cys	Ala	Leu	Ile	Arg	Gln	Asp		
		50				55					60						
Gln	Glu	Arg	Ser	Asp	Gly	Leu	Arg	Gln	Leu	Gln	Thr	Leu	Ile	Thr	Glu		
65					70					75					80		
Gly	Phe	Asp	Ser	Gly	Ile	Ser	Ala	Ser	Ser	Leu	Asp	Asp					
				85				90									

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<210> 809
<211> 405
<212> DNA
<213> Homo sapiens
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120
gacgcgtggt cgcgtaaagt ggagagacga tcggtgccgc ccttgcccca cgatcctgat
180
ggccccgaga ttctgacga tgtcaccacc ctgccccaac aggtaatggg tctgccacgt
240
cacctgggta tccactcagc tggaatggtg ctgacgcgag aaccagtagg acgcatctgc
300
cccattgagc cggctcgaat gtttggtcgc acggggctgc agtgggacaa anaaaactgt
360
gcctggatgg ggttggggaa gtttgatctg cttgggttgg ggatg
405
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<210> 810
<211> 135
<212> PRT
<213> Homo sapiens
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<400> 810
Xaa Gly Gly Gly Gly Gly Gly Gly Val Phe Phe Pro Pro Lys Lys Lys Lys
 1          5          10          15
Gly Gly Gly Gly Gly Pro Pro Pro Pro Pro Pro Leu Phe Phe Pro Arg
          20          25          30
Gly Val Tyr Ser Gln Gly Gln Gln Asp Ala Trp Ser Arg Gln Met Glu
          35          40          45
Arg Arg Ser Val Pro Pro Leu Pro His Asp Pro Asp Gly Pro Glu Ile
          50          55          60
Pro Asp Asp Val Thr Thr Leu Ala Gln Gln Val Met Gly Leu Pro Arg
65          70          75          80
His Leu Gly Ile His Ser Ala Gly Met Val Leu Thr Arg Glu Pro Val
          85          90          95
Gly Arg Ile Cys Pro Ile Glu Pro Ala Arg Met Phe Gly Arg Thr Gly
          100          105          110
Leu Gln Trp Asp Lys Xaa Asn Cys Ala Trp Met Gly Leu Gly Lys Phe
          115          120          125
Asp Leu Leu Gly Leu Gly Met

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130

135

<210> 811  
 <211> 642  
 <212> DNA  
 <213> Homo sapiens

<400> 811  
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 cagtgccaat gactgccaat ggcaaagaag agctccaacc aaacaccagg tgcttcatgg  
 120  
 tgggtgacaca ttaacaacac cggggaagca gtactgcaa cacctagata tgagaaaaag  
 180  
 aaaacaggca cttaaagcga ggctaaccga ctttcaggaa tgataaaggg cagaggaccc  
 240  
 tgtcacctct acccctgcta cttaaaggcgt ggcccacaga gcagcagcac cagcagcaca  
 300  
 taaaatgggg ttaaatatga caggaaaaac aagggtgacag ggaaatgggg tgaagatcaa  
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 gttcgtggta ngctcttctt tcctagaggc tttgggcctg agctcttggg gaaagctctc  
 420  
 caacacctca ggggtgtgctt gttccctctgc cctgtgggga tgctcttctt acgggtggct  
 480  
 gactggctcc cactttcctc cgtattgttg tcttgtctct tcctcacia ccatcaaggc  
 540  
 tctttccctt aattctataa gacagtacct ctggccttaga aattatatgc cctcctttaa  
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 aaaaacgaaa tgctagagga catagaactt gaggaataat tt  
 642

<210> 812  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 812  
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 Pro Val Ser His Pro Tyr Lys Glu His Pro His Arg Ala Gly Glu Gln  
 20 25 30  
 Ala His Pro Glu Val Leu Glu Ser Phe Leu Gln Glu Leu Arg Pro Lys  
 35 40 45  
 Ala Ser Arg Lys Glu Arg Xaa Thr Thr Asn Leu Ile Phe Thr Pro Phe  
 50 55 60  
 Pro Cys His Leu Val Phe Pro Val Ile Phe Asn Pro Ile Leu Cys Ala  
 65 70 75 80  
 Ala Gly Ala Ala Ala Leu Trp Ala Thr Pro Leu Val Ala Gly Val Glu  
 85 90 95  
 Val Thr Gly Ser Ser Ala Leu Tyr His Ser  
 100 105

<210> 813  
 <211> 558

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 813

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60
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120
gttcgctgac cagcaccggg ccgcccggct gggccgggaa accgtggaac aagggaaagcg
180
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240
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300
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420
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480
gcgtcgacct gttcgccgaa cccgccggcg gcgcagaagg cgaggcgga gaatttgagc
540
ttgttggcgg atacgcgt
558

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&lt;210&gt; 814

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 814

```

Met Thr Phe Ser Ala Gly Ser Leu Thr Ser Thr Gly Pro Pro Gly Trp
1          5          10          15
Ala Gly Lys Pro Trp Asn Lys Gly Ser Gly Gly Gly Ala Arg Gly Asp
20          25          30
Ala Phe Gly Pro Leu Ala Phe Gly Gln Arg Ala Ala Gln Phe Gly Val
35          40          45
Glu Asp Asp Pro Arg Pro Phe Asp Leu Asp His Asp Leu Gln Leu Pro
50          55          60
Ala Ile Val Phe Ala Ala Asp Ile Gln Arg Ala Ala Ala His Gln Arg
65          70          75          80
Leu Ala Gly Asp Gln Gly Glu Val Gln His His Leu Gln Arg Gly Leu
85          90          95
Gly Gln Arg Leu Arg Phe His Pro Pro Val Glu Leu Arg Ala Leu Ile
100         105         110
Val Gly Asn Gln Pro Leu Val Arg Gly Phe Arg Phe Ala Arg Val Asp
115         120         125
Leu Phe Ala Glu Pro Ala Gly Gly Ala Glu Gly Glu Ala Glu Glu Phe
130         135         140
Glu Leu Val Gly Gly Tyr Ala
145         150

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&lt;210&gt; 815

&lt;211&gt; 315

<212> DNA

<213> Homo sapiens

<400> 815

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120  
agctagcgca ggagaaagcc gagacctcac gtccgaagcg gattcagcaa gtgcacaacc  
180  
ttctacccac gctgagggtt ccagtgaagt tactgctacg tccagtatag atgagcaggt  
240  
agacctcatt gctgcaccgt taagcgaaga gtccaatgtc agcaagctcg ggccgtcccc  
300  
tgaggccgat acatc  
315

<210> 816

<211> 90

<212> PRT

<213> Homo sapiens

<400> 816

Met	Pro	Ser	Asp	Leu	Pro	Lys	Val	Asp	Asp	Glu	Lys	Ala	His	Asp	Ala
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Pro	His	Thr	Asp	Gly	Ser	Glu	Pro	Gly	Gln	Ala	Ser	Ala	Gly	Glu	Ser
			20					25					30		
Arg	Asp	Leu	Thr	Ser	Glu	Ala	Asp	Ser	Ala	Ser	Ala	Gln	Pro	Ser	Thr
		35					40					45			
His	Ala	Glu	Val	Ser	Ser	Glu	Val	Thr	Ala	Thr	Ser	Ser	Ile	Asp	Glu
	50					55				60					
Gln	Val	Asp	Leu	Ile	Ala	Ala	Pro	Leu	Ser	Glu	Glu	Ser	Asn	Val	Ser
65					70					75				80	
Lys	Leu	Gly	Pro	Ser	Pro	Glu	Ala	Asp	Thr						
				85					90						

<210> 817

<211> 321

<212> DNA

<213> Homo sapiens

<400> 817

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120  
aatacacttt tctcaaagct tcaaattaat caatccatta tattctgcaa ctctgttaat  
180  
agtgttgagc tgctggctaa aaaaataact gaactcgggt attcatgctt ctacattcat  
240  
gctaagatgt tgcaagacca cagaaatcga gtattccatg attgtcgtaa tgggtgcttg  
300  
agaaaccttg tgtgcacaga t  
321

<210> 818  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 818  
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 20 25 30  
 Glu Gly Gln Lys Val His Cys Leu Asn Thr Leu Phe Ser Lys Leu Gln  
 35 40 45  
 Ile Asn Gln Ser Ile Ile Phe Cys Asn Ser Val Asn Ser Val Glu Leu  
 50 55 60  
 Leu Ala Lys Lys Ile Thr Glu Leu Gly Tyr Ser Cys Phe Tyr Ile His  
 65 70 75 80  
 Ala Lys Met Leu Gln Asp His Arg Asn Arg Val Phe His Asp Cys Arg  
 85 90 95  
 Asn Gly Ala Cys Arg Asn Leu Val Cys Thr Asp  
 100 105

<210> 819  
 <211> 3422  
 <212> DNA  
 <213> Homo sapiens

<400> 819  
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 120  
 gcagggggccc atggactctc caaaggcccc ctggagaagc ggccctatct tggccccggt  
 180  
 ctgcccctga ctccccgaga caggggccagt ggacacaaag gggccagtga ggacaactct  
 240  
 ggtggaggag gcaagaagcc aaagatggag gagctgggcc tggcctccca cccccggag  
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 360  
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 420  
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 480  
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 780



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 3240  
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 ca  
 3422

<210> 820

<211> 494

<212> PRT

<213> Homo sapiens

<400> 820

Met	Asn	Ser	Lys	Lys	Leu	Ser	Ser	Thr	Asp	Cys	Phe	Lys	Thr	Glu	Ala
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Phe	Thr	Ser	Pro	Glu	Ala	Leu	Gln	Pro	Gly	Gly	Thr	Ala	Leu	Ala	Pro
			20					25					30		
Lys	Lys	Arg	Ser	Arg	Lys	Gly	Arg	Ala	Gly	Ala	His	Gly	Leu	Ser	Lys
		35				40					45				
Gly	Pro	Leu	Glu	Lys	Arg	Pro	Tyr	Leu	Gly	Pro	Ala	Leu	Pro	Leu	Thr
	50				55					60					
Pro	Arg	Asp	Arg	Ala	Ser	Gly	Thr	Gln	Gly	Ala	Ser	Glu	Asp	Asn	Ser
65				70					75					80	
Gly	Gly	Gly	Gly	Lys	Lys	Pro	Lys	Met	Glu	Glu	Leu	Gly	Leu	Ala	Ser

[illegible]

<210> 821

<211> 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 821

acgcgtcccc tcacctgcgg tatggaccaa gtgagttgtg tgctcgacaa tgggttcgcc  
 60  
 gccatcatgg atgtgccggg tttcaactat cgcgcccatc gttacaccga agcctatcgg  
 120  
 cgtttgccgc aaaatgtggt gctaggttcg gaaacgacct cgacggtgag cagccgtggt  
 180  
 gtctacaagt ttcctgttgt gctgaagtcc gatgccatct atcccgacca tcagtcgtca  
 240  
 ggctacgaca cagagtattg ttcgtggtcg aacacccccg atgtcgattt cgccctcgcc  
 300  
 gaagactatc cctggacgat ggggcagttt gtctggacgg gcttcgacta cctcggtgaa  
 360  
 ccttcgcctt acgacacgga tgcctggccc tctcacgcct ccctcttcgg cattgtcgac  
 420

&lt;210&gt; 822

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 822

Met	Asp	Gln	Val	Ser	Cys	Val	Leu	Asp	Asn	Gly	Phe	Ala	Ala	Ile	Met
1				5					10					15	
Asp	Val	Pro	Gly	Phe	Asn	Tyr	Arg	Ala	His	Arg	Tyr	Thr	Glu	Ala	Tyr
			20					25					30		
Arg	Arg	Leu	Pro	Gln	Asn	Val	Val	Leu	Gly	Ser	Glu	Thr	Thr	Ser	Thr
			35				40					45			
Val	Ser	Ser	Arg	Gly	Val	Tyr	Lys	Phe	Pro	Val	Val	Leu	Lys	Ser	Asp
	50					55				60					
Ala	Ile	Tyr	Pro	Asp	His	Gln	Ser	Ser	Gly	Tyr	Asp	Thr	Glu	Tyr	Cys
65					70				75					80	
Ser	Trp	Ser	Asn	Thr	Pro	Asp	Val	Asp	Phe	Ala	Leu	Ala	Glu	Asp	Tyr
			85					90					95		
Pro	Trp	Thr	Met	Gly	Gln	Phe	Val	Trp	Thr	Gly	Phe	Asp	Tyr	Leu	Gly
			100				105						110		
Glu	Pro	Ser	Pro	Tyr	Asp	Thr	Asp	Ala	Trp	Pro	Ser	His	Ala	Ser	Leu
			115				120					125			
Phe	Gly	Ile	Val	Asp											
			130												

&lt;210&gt; 823

&lt;211&gt; 550

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 823

tctagattct tgggcagccg agccccctctt gaattcctca gcctaccatc atgatcaaca  
 60  
 cctcccatgt tccgtccatg aatgaccgca ctgacagcac tggagagatt taatgggtca  
 120

ccaattgagg cagtgaaggc actcatggca ctcagagctg gaatggggct gatctgagtt  
 180  
 gtactgttga ctgcagtggg gatgacaacc tgcattcctt tgctggctgc atcgacaact  
 240  
 gctttgtaaa tggcatctac ggaagcatca cctggggccac ccacaacgag gccatccttc  
 300  
 acctgttgac caagagatgg gtcaatcctc gggtgcaact cacaaggtgt atcttgaaaa  
 360  
 ggtggaagtg tagtgtttgg attctcagga agtgctgtga gcccaggctg agtgcttatt  
 420  
 cttttgttta ggagagctgc atcttcctgc attctcacct gaaagttctg aaacagacaa  
 480  
 gccatggggg tattgttagc tgggcaagga attgtggact gtccttgga cgcctggaga  
 540  
 ttctggtacc  
 550

<210> 824

<211> 161

<212> PRT

<213> Homo sapiens

<400> 824

Met	Ala	Cys	Leu	Phe	Gln	Asn	Phe	Gln	Val	Arg	Met	Gln	Glu	Asp	Ala
1				5					10					15	
Ala	Leu	Leu	Asn	Lys	Arg	Ile	Ser	Thr	Gln	Pro	Gly	Leu	Thr	Ala	Leu
			20					25					30		
Pro	Glu	Asn	Pro	Asn	Thr	Thr	Leu	Pro	Pro	Phe	Gln	Asp	Thr	Pro	Cys
		35					40					45			
Glu	Leu	Gln	Pro	Arg	Ile	Asp	Pro	Ser	Leu	Gly	Gln	Gln	Val	Lys	Asp
	50					55					60				
Gly	Leu	Val	Val	Gly	Gly	Pro	Gly	Asp	Ala	Ser	Val	Asp	Ala	Ile	Tyr
65					70				75					80	
Lys	Ala	Val	Val	Asp	Ala	Ala	Ser	Lys	Gly	Met	Gln	Val	Val	Ile	Thr
			85						90					95	
Thr	Ala	Val	Asn	Ser	Thr	Thr	Gln	Ile	Ser	Pro	Ile	Pro	Ala	Leu	Ser
			100						105				110		
Ala	Met	Ser	Ala	Phe	Thr	Ala	Ser	Ile	Gly	Asp	Pro	Leu	Asn	Leu	Ser
	115						120					125			
Ser	Ala	Val	Ser	Ala	Val	Ile	His	Gly	Arg	Asn	Met	Gly	Gly	Val	Asp
	130					135				140					
His	Asp	Gly	Arg	Leu	Arg	Asn	Ser	Arg	Gly	Ala	Arg	Leu	Pro	Lys	Asn
145				150					155					160	
Leu															

<210> 825

<211> 327

<212> DNA

<213> Homo sapiens

<400> 825

gcgtttgcga ccggccgtaa cccgcagaat gcggcggtgt gttgcactga gggatatttg  
 60

cagttgctgg atgagcgcga gatgcgcggc gtgctcggcc acgagctgat gcacgtgtac  
 120  
 aaccgcgata tcctcacctc ttcgggtggcg gcgggtatcg cctccatcat cggtacgatt  
 180  
 gcgcagattc tttcgtttgg cgcgatgttc ggtggatcca accgcgatgg tgaacgttcc  
 240  
 aacccccctcg ccatgttcgt ggttgctatg ctggctccca ttgctactca ggcatccag  
 300  
 atggctatta gccgcacccg tgaattc  
 327

<210> 826

<211> 109

<212> PRT

<213> Homo sapiens

<400> 826

Ala	Phe	Ala	Thr	Gly	Arg	Asn	Pro	Gln	Asn	Ala	Ala	Val	Cys	Cys	Thr
1				5				10					15		
Glu	Gly	Ile	Leu	Gln	Leu	Leu	Asp	Glu	Arg	Glu	Met	Arg	Gly	Val	Leu
			20					25					30		
Gly	His	Glu	Leu	Met	His	Val	Tyr	Asn	Arg	Asp	Ile	Leu	Thr	Ser	Ser
			35				40						45		
Val	Ala	Ala	Gly	Ile	Ala	Ser	Ile	Ile	Gly	Thr	Ile	Ala	Gln	Ile	Leu
			50				55						60		
Ser	Phe	Gly	Ala	Met	Phe	Gly	Gly	Ser	Asn	Arg	Asp	Gly	Glu	Arg	Ser
65					70				75					80	
Asn	Pro	Leu	Ala	Met	Phe	Val	Val	Ala	Met	Leu	Ala	Pro	Ile	Ala	Thr
				85					90					95	
Gln	Val	Ile	Gln	Met	Ala	Ile	Ser	Arg	Thr	Arg	Glu	Phe			
			100					105							

<210> 827

<211> 534

<212> DNA

<213> Homo sapiens

<400> 827

nacgcgtacg tcaatatgca tcgtccagtc gttatcgcaa cgccgaaatc gatgctgcgc  
 60  
 aacaagatgg cgacctcgga tcccgaagag ttcaccaccg gtaggtggcg tcctgttcta  
 120  
 cccgacccat cgatcaccga cccgacggcc gttacgagga ttatcttgtg ctctggcaag  
 180  
 gcgcggtggg agctgggtcaa gcaacgtaag gccgccagtc ttgacggaca gctcgccatc  
 240  
 atccccgatgg agcgtctcta cccgctacca gtcgacgagt tggctgaggt ttttgcgctt  
 300  
 tacaccaacg tcacggatgt ccgctgggtc caagaagagc cagagaacca gggcgccctg  
 360  
 tactacatgc tgacccacct gccccaggcc atgtcggaga agctgccagg attctttgat  
 420  
 gggttagtcg gcatcaccgc cccaccgtcc tcagctccgt cggtggggaca gcacagcgtc  
 480

cacatccgtg aagagcagga gttactcgag aaggctatag cctgagcgac ctga  
534

<210> 828  
<211> 174  
<212> PRT  
<213> Homo sapiens

<400> 828  
Xaa Ala Tyr Val Asn Met His Arg Pro Val Val Ile Ala Thr Pro Lys  
1 5 10 15  
Ser Met Leu Arg Asn Lys Met Ala Thr Ser Asp Pro Glu Glu Phe Thr  
20 25 30  
Thr Gly Arg Trp Arg Pro Val Leu Pro Asp Pro Ser Ile Thr Asp Pro  
35 40 45  
Thr Ala Val Thr Arg Ile Ile Leu Cys Ser Gly Lys Ala Arg Trp Glu  
50 55 60  
Leu Val Lys Gln Arg Lys Ala Ala Ser Leu Asp Gly Gln Leu Ala Ile  
65 70 75 80  
Ile Pro Met Glu Arg Leu Tyr Pro Leu Pro Val Asp Glu Leu Ala Glu  
85 90 95  
Val Phe Ala Pro Tyr Thr Asn Val Thr Asp Val Arg Trp Val Gln Glu  
100 105 110  
Glu Pro Glu Asn Gln Gly Ala Trp Tyr Tyr Met Leu Thr His Leu Pro  
115 120 125  
Gln Ala Met Ser Glu Lys Leu Pro Gly Phe Phe Asp Gly Leu Val Gly  
130 135 140  
Ile Thr Arg Pro Pro Ser Ser Ala Pro Ser Val Gly Gln His Ser Val  
145 150 155 160  
His Ile Arg Glu Glu Gln Glu Leu Leu Glu Lys Ala Ile Ala  
165 170

<210> 829  
<211> 492  
<212> DNA  
<213> Homo sapiens

<400> 829  
nagtggccgg gtggccggcg ggtgccagcc gccatggagg ccgtgccccg catgccccatg  
60  
atctggctgg acctgaagga ggccggtgac ttctacttcc agccagctgt gaagaagttt  
120  
gtcctgaaga attatggaga gaaccagaa gcctacaatg aagaactgaa gaagctggag  
180  
ttgctcagac agaatgctgt ccgtgtccca cgagactttg agggctgtag tgcctccgc  
240  
aagtacctcg gccagcttca ttacctgcag agtcgggtcc ccatgggctc gggccaggag  
300  
gccgtgtcc ctgtcacatg gacagagatc ttctcaggca agtctgtggc ccatgaggac  
360  
atcaagtacg agcaggcctg tattttctcc aacnttggag cgctgcactc catgctgggg  
420  
gccatggaca agcgggtgtc tgaggagggc atgaaggtct cctgtaccca tttccagtgc  
480

gcagccggcg cc  
492

<210> 830  
<211> 164  
<212> PRT  
<213> Homo sapiens

<400> 830  
Xaa Trp Pro Gly Gly Arg Arg Val Pro Ala Ala Met Glu Ala Val Pro  
1 5 10 15  
Arg Met Pro Met Ile Trp Leu Asp Leu Lys Glu Ala Gly Asp Phe His  
20 25 30  
Phe Gln Pro Ala Val Lys Lys Phe Val Leu Lys Asn Tyr Gly Glu Asn  
35 40 45  
Pro Glu Ala Tyr Asn Glu Glu Leu Lys Lys Leu Glu Leu Leu Arg Gln  
50 55 60  
Asn Ala Val Arg Val Pro Arg Asp Phe Glu Gly Cys Ser Val Leu Arg  
65 70 75 80  
Lys Tyr Leu Gly Gln Leu His Tyr Leu Gln Ser Arg Val Pro Met Gly  
85 90 95  
Ser Gly Gln Glu Ala Ala Val Pro Val Thr Trp Thr Glu Ile Phe Ser  
100 105 110  
Gly Lys Ser Val Ala His Glu Asp Ile Lys Tyr Glu Gln Ala Cys Ile  
115 120 125  
Phe Ser Asn Xaa Gly Ala Leu His Ser Met Leu Gly Ala Met Asp Lys  
130 135 140  
Arg Val Ser Glu Glu Gly Met Lys Val Ser Cys Thr His Phe Gln Cys  
145 150 155 160  
Ala Ala Gly Ala

<210> 831  
<211> 303  
<212> DNA  
<213> Homo sapiens

<400> 831  
gcgttgctgc ggcgtggcga gaccatgacg gcggagaatc agcgtgccaa tgtgcgcac  
60  
gccgcaaacc acatcaagga ggttgcggtc gatcacgagg tcgttgtagc ccatggtaat  
120  
ggcccccagg taggtctgtt ggctctgcaa tcgacagcct acgaggaagt cggtatctat  
180  
ccgctggatg tcctgggcgc agagtcacag gccatgatcg gctacatgat cgagcaggaa  
240  
ctcggcaatg tgatgcctca ggatcagcag atcgtcacca tgatcacgat gacagtcgtc  
300  
gac  
303

<210> 832  
<211> 101  
<212> PRT



<213> Homo sapiens

<400> 832

```

Ala Leu Leu Arg Arg Gly Glu Thr Met Thr Ala Glu Asn Gln Arg Ala
 1             5             10             15
Asn Val Arg Ile Ala Ala Asn His Ile Lys Glu Val Ala Val Asp His
          20             25             30
Glu Val Val Val Ala His Gly Asn Gly Pro Gln Val Gly Leu Leu Ala
          35             40             45
Leu Gln Ser Thr Ala Tyr Glu Glu Val Gly Ile Tyr Pro Leu Asp Val
          50             55             60
Leu Gly Ala Glu Ser Gln Ala Met Ile Gly Tyr Met Ile Glu Gln Glu
65             70             75             80
Leu Gly Asn Val Met Pro Gln Asp Gln Gln Ile Val Thr Met Ile Thr
          85             90             95
Met Thr Val Val Asp
          100

```

<210> 833

<211> 466

<212> DNA

<213> Homo sapiens

<400> 833

```

nngatccgcg cgatcgacga ggcgggtgcg tgatgttgac agcgaaaatg cgcagccggc
60
catttgacga gggctgaaaa cgtcttctac cggctctgctg tgccgcctgg tgtcagcaaa
120
cgacgccatg atcgtccagt gggatatgat ttgttctgcg gcgctggggg attcagttgc
180
ggattccacc aggccgggtg gcatgttgcg gcggcggttg agcacgacgt gtcggcgtct
240
ctgacctatg tcatgaatct cgctcgcccc ggcgtcaaga ttcacatcga ccccgagcac
300
ccggagctgg gcccaagacc accgcgaacc aagaagaaga gcggcgggcg agtgccgttc
360
gatgcgcatg tcggaactgg gtggatcgcc agcgagcccg ccgacgatcc cggctgcgaa
420
cacttctacg tgtacgacgt caagaacctc agcggcgagc ggatcc
466

```

<210> 834

<211> 142

<212> PRT

<213> Homo sapiens

<400> 834

```

Gln Arg Lys Cys Ala Ala Gly His Leu Thr Arg Ala Glu Asn Val Phe
 1             5             10             15
Tyr Arg Ser Ala Val Pro Pro Gly Val Ser Lys Arg Arg His Asp Arg
          20             25             30
Pro Val Gly Ile Asp Leu Phe Cys Gly Ala Gly Gly Phe Ser Cys Gly
          35             40             45
Phe His Gln Ala Gly Trp His Val Ala Ala Ala Val Glu His Asp Val

```

50	55	60
Ser Ala Ser Leu Thr Tyr Val Met Asn Leu Ala Arg Pro Gly Val Lys		
65	70	75
Ile His Ile Asp Pro Glu His Pro Glu Leu Gly Pro Arg Pro Pro Arg		80
	85	90
Thr Lys Lys Lys Ser Gly Gly Ala Val Pro Phe Asp Ala His Val Gly		95
	100	105
Thr Gly Trp Ile Ala Ser Glu Pro Ala Asp Asp Pro Gly Cys Glu His		110
	115	120
Phe Tyr Val Tyr Asp Val Lys Asn Leu Ser Gly Glu Arg Ile		125
130	135	140

&lt;210&gt; 835

&lt;211&gt; 482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 835

```

acgcgtgaag ggattttgat caccagaac aaccacctgt ctttttagat caagaagcag
60
aagctcagag caaagaacat cacaccacgt ccctcagtga ttgaagcagt gattgagtca
120
cagaataaat ctggaactca ggtcttctga tctttgctcc agatggttaga gacaaaacta
180
aaagtaaaat accaagtga atcaaagcat cacgattgag cccagaacat gaaaaagaac
240
ttcctggccc acttgagaaa ctgttaaacc ggacatacct ttggggactt cttcccttct
300
ctggaataag attgatgttt ccatgctgtg aaagacgatg atgttccttc tcccagattc
360
ctgctgtctt caaaaggcct agcaaaaacc actgctgctg ggtgcagttg agaaagggaa
420
tgaagaacaa tcccatggcc atgcaggcac tcctcccctc cacctctctg cccttcacgc
480
gt
482

```

&lt;210&gt; 836

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 836

Met Ala Met Gly Leu Phe Phe Ile Pro Phe Leu Asn Cys Thr Gln Gln		
1	5	10
Gln Trp Phe Leu Leu Gly Leu Leu Lys Thr Ala Gly Ile Trp Glu Lys		15
	20	25
Glu His His Arg Leu Ser Gln His Gly Asn Ile Asn Leu Ile Pro Glu		30
	35	40
Lys Gly Arg Ser Pro Gln Arg Tyr Val Arg Phe Asn Ser Phe Ser Ser		45
	50	55
Gly Pro Gly Ser Ser Phe Ser Cys Ser Gly Leu Asn Arg Asp Ala Leu		60
65	70	75
Ile Ser Leu Gly Ile Leu Leu Leu Val Leu Ser Leu Thr Ser Gly Ala		80

				85					90					95					
Lys	Ile	Arg	Arg	Pro	Glu	Phe	Gln	Ile	Tyr	Ser	Val	Thr	Gln	Ser	Leu				
				100				105						110					
Leu	Gln	Ser	Leu	Arg	Asp	Val	Val												
				115				120											

&lt;210&gt; 837

&lt;211&gt; 509

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 837

```

acgcgtggac ccccgttctg cccgcctttg cagtcacgc cctccctgaa gtcaccgctg
60
cagaaatacg caggcactga cctgggggta cagccaggca agggagagac gaggggctca
120
ctctgcacca gccaaaggcct gtgtcctggc atggctcccc caggaagcga ggatggcggt
180
gcctggcggt cgagcccctc ttatcctggg gaatgctggg gggcgttcct gagcagacct
240
gcctgctgcc cctgctggct ggcactgccc ctccccggg gaaagggttg gtggtcccc
300
caggggaact caaagcaggg gagcccctgg aggcccaag tccctggaat atcttggcgc
360
tcagatggcc cccctcgaac accctcacac gggggggccg cgcggtggga ggtgaccag
420
cagccactct tacttggcga agacttttct cccaatgcga gcgcgggttg tatcagcctg
480
agccttcagg ttggtgaggc tgggggtacc
509

```

&lt;210&gt; 838

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 838

Met	Ala	Pro	Pro	Gly	Ser	Glu	Asp	Gly	Gly	Ala	Trp	Arg	Ser	Ser	Pro				
1				5				10						15					
Ser	Tyr	Pro	Gly	Glu	Cys	Trp	Gly	Ala	Phe	Leu	Ser	Arg	Pro	Ala	Cys				
			20					25					30						
Cys	Pro	Cys	Trp	Leu	Ala	Leu	Pro	Leu	Pro	Arg	Gly	Lys	Val	Gly	Trp				
			35				40					45							
Ser	Pro	Gln	Gly	Asn	Ser	Lys	Gln	Gly	Ser	Pro	Trp	Arg	Pro	Gln	Val				
			50			55					60								
Pro	Gly	Ile	Ser	Trp	Arg	Ser	Asp	Gly	Pro	Pro	Arg	Thr	Pro	Ser	His				
65					70				75					80					
Gly	Gly	Ala	Ala	Arg	Trp	Glu	Val	Thr	Gln	Gln	Pro	Leu	Leu	Leu	Gly				
				85				90					95						
Glu	Asp	Phe	Ser	Pro	Asn	Ala	Ser	Ala	Gly	Gly	Ile	Ser	Leu	Ser	Leu				
				100				105					110						
Gln	Val	Gly	Glu	Ala	Gly	Val													
				115															

<210> 839  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 839  
 acgcgtctcg tgttcgtgcg gcacggcagg acggcggttca atgtggaggg tcggctccag  
 60  
 ggccgtctcg acatgccgtt ggatgagggtg gggcgccgtc aggcactcac agtgggtcaa  
 120  
 gtcacgcccg agatggaacc tgacgcgacg atggcctctc cgctacaacg tgcgcgcgac  
 180  
 acagctcagg caatcgggtg ttgtgctgga ttgggcgtac agctggatga tcgactcatc  
 240  
 gagatcgatg tcggacgttg gtcgggacaa cgggctgcgg acctgcgtcg caacgatcct  
 300  
 gactacgcag caagtgtggt cagccctatc gattaccggg tcggagn  
 347

<210> 840  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 840  
 Thr Arg Leu Val Phe Val Arg His Gly Arg Thr Ala Phe Asn Val Glu  
 1 5 10 15  
 Gly Arg Leu Gln Gly Arg Leu Asp Met Pro Leu Asp Glu Val Gly Arg  
 20 25 30  
 Arg Gln Ala Leu Thr Val Ala Gln Val Ile Ala Glu Met Glu Pro Asp  
 35 40 45  
 Ala Ile Met Ala Ser Pro Leu Gln Arg Ala Arg Asp Thr Ala Gln Ala  
 50 55 60  
 Ile Gly Ala Cys Ala Gly Leu Gly Val Gln Leu Asp Asp Arg Leu Ile  
 65 70 75 80  
 Glu Ile Asp Val Gly Arg Trp Ser Gly Gln Arg Ala Ala Asp Leu Arg  
 85 90 95  
 Arg Asn Asp Pro Glu Tyr Ala Ala Ser Val Val Ser Pro Ile Asp Tyr  
 100 105 110  
 Arg Val Gly  
 115

<210> 841  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 841  
 tccggaactc accccgacgc cgtcattatg gacgtcatga tgccgcgtct agatggcttg  
 60  
 gaagccaccc ggatgctgcg cagcaatggc aacgacgtcc cgatcctcgt cctcaccgcc  
 120  
 cgcgatgctg tcgacgatcg cgttgacggc ctcgacgctg gcgccgatga ctacatggtc  
 180

aagcccttcg ccctcgacga actcctcgtc cgcctacgcg ccctcactcg tcgttcccgt  
 240  
 cccgagccag agcaaaacga ggccccctgaa caactctcct tcgctgacct cacccttgat  
 300  
 ccaggcaccc gcgagatcac ccgcgggaac cgtcgcatca gtttgacgcg t  
 351

<210> 842  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 842  
 Ser Gly Thr His Pro Asp Ala Val Ile Met Asp Val Met Met Pro Arg  
 1 5 10 15  
 Leu Asp Gly Leu Glu Ala Thr Arg Met Leu Arg Ser Asn Gly Asn Asp  
 20 25 30  
 Val Pro Ile Leu Val Leu Thr Ala Arg Asp Ala Val Asp Asp Arg Val  
 35 40 45  
 Asp Gly Leu Asp Ala Gly Ala Asp Asp Tyr Met Val Lys Pro Phe Ala  
 50 55 60  
 Leu Asp Glu Leu Leu Ala Arg Leu Arg Ala Leu Thr Arg Arg Ser Arg  
 65 70 75 80  
 Pro Glu Pro Glu Gln Asn Glu Ala Pro Glu Gln Leu Ser Phe Ala Asp  
 85 90 95  
 Leu Thr Leu Asp Pro Gly Thr Arg Glu Ile Thr Arg Gly Asn Arg Arg  
 100 105 110  
 Ile Ser Leu Thr Arg  
 115

<210> 843  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 843  
 ctagcccagg ctctcgtcca cgaggggctg cgcgctgtgg cctctggggc aaaccgggtc  
 60  
 ggccctcaagc gcggtatcga gaaggctgtc gacgccgttg tggaggagct ccgctctatc  
 120  
 tcgcgcgcca tcgacaccac ctcgacatg gccagcgttg ccaccatctc cagccgtgac  
 180  
 gagaccatcg gcgcctcat cgctgaggcc ttcgacaagg ttggttaagga cggggttatc  
 240  
 accgtcgacg agtcgcagac cttcggcact gagcttgact tcaccgaggg catgcagttc  
 300  
 gacaagggtt acctgtcgcc ctacatggtc accgaccagg ttcgcatgga ggctgtgac  
 360  
 gaggatcctt acatcctcat tcaactcccgc aag  
 393

<210> 844  
 <211> 131  
 <212> PRT

<213> Homo sapiens

<400> 844

```

Leu Ala Gln Ala Leu Val His Glu Gly Leu Arg Ala Val Ala Ser Gly
 1           5           10           15
Ala Asn Pro Val Gly Leu Lys Arg Gly Ile Glu Lys Ala Val Asp Ala
 20           25           30
Val Val Glu Glu Leu Arg Ser Ile Ser Arg Ala Ile Asp Thr Thr Ser
 35           40           45
Asp Met Ala Ser Val Ala Thr Ile Ser Ser Arg Asp Glu Thr Ile Gly
 50           55           60
Ala Leu Ile Ala Glu Ala Phe Asp Lys Val Gly Lys Asp Gly Val Ile
 65           70           75           80
Thr Val Asp Glu Ser Gln Thr Phe Gly Thr Glu Leu Asp Phe Thr Glu
 85           90           95
Gly Met Gln Phe Asp Lys Gly Tyr Leu Ser Pro Tyr Met Val Thr Asp
 100          105          110
Gln Val Arg Met Glu Ala Val Ile Glu Asp Pro Tyr Ile Leu Ile His
 115          120          125
Ser Arg Lys
 130

```

<210> 845

<211> 505

<212> DNA

<213> Homo sapiens

<400> 845

```

gccacctgcc caaggctgga tgacgggcct agggcacatc taaggaacaa ggacaggaca
 60
gaagcaaagc cacagctgct ggggcagggt gggggccggt atgtctggcc agcagcatca
 120
cccttgcccc cggcggggct ccaggaccgg gagactcatc agccggaagc tcttgaggga
 180
ggcggctgcc gtgaagacag gcacccttgc tcctgagagg ggcacccaga gaaccaagac
 240
tcagcagagg gaacacaggg ctacgcccag gcccaggcc tgatatccag agtctaaatc
 300
ccacctcagc ccagggggga gccttgagag gagctatgtc cctcatggac ccagtttcc
 360
tctgcatacg ggctccgagc cctgcactgc ctccagggtg gttcccaagg tcttttccca
 420
ttacctccta cgtgagcact cagtaaacca atacacatac acaagggtga cattaattcc
 480
agccacagaa tcccaggcca cgcgt
 505

```

<210> 846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 846

```

Met Gly Lys Asp Leu Gly Asn Tyr Pro Gly Gly Ser Ala Gly Leu Gly

```

```

      1             5             10             15
Ala Arg Met Gln Arg Lys Leu Gly Ser Met Arg Asp Ile Ala Pro Leu
      20             25             30
Lys Ala Pro Pro Trp Ala Glu Val Gly Phe Arg Leu Trp Ile Ser Gly
      35             40             45
Leu Gly Pro Gly Arg Ser Pro Val Phe Pro Leu Leu Ser Leu Gly Ser
      50             55             60
Leu Gly Ala Pro Leu Arg Ser Lys Gly Ala Cys Leu His Gly Ser Arg
      65             70             75             80
Leu Leu Gln Glu Leu Pro Ala Asp Glu Ser Pro Gly Pro Gly Ala Pro
      85             90             95
Pro Gly Ala Gly Val Met Leu Leu Ala Arg His Thr Gly Pro His Pro
      100            105            110
Ala Pro Ala Ala Val Ala Leu Leu Ser Cys Pro Cys Ser Leu Asp
      115            120            125
Val Pro
      130

```

&lt;210&gt; 847

&lt;211&gt; 448

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 847

```

aagcttttaa aggagcaaga aaacatgaaa gagctagtag tcaaccttct ccgcatgact
60
caaatcaaaa ttgatgaaaa ggaacaaaag tccaaggatt tcctgaaagc tcagcaaaaa
120
tacaccaaca ttgttaaaga aatgaaagca aaggatcttg aaatcaggat acacaagaag
180
aaaaaatgtg aaatttatcg gagactgaga gagcttgcta aactgtatga caccattcga
240
aatgaaagaa acaaatttgt taacttactc cacaaagctc atcagaaagt aaatgaaata
300
aaagaaaggc ataaaatgtc attaaatgaa cttgaaattc tgagaaatag tgccgttagt
360
caagaaagaa agctacaaaa ttccatgctg aaacacgcca acaatgttac catcagagag
420
agcatgcaaa acgatgtgcg caaaattt
448

```

&lt;210&gt; 848

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 848

```

Lys Leu Leu Lys Glu Gln Glu Asn Met Lys Glu Leu Val Val Asn Leu
      1             5             10             15
Leu Arg Met Thr Gln Ile Lys Ile Asp Glu Lys Glu Gln Lys Ser Lys
      20             25             30
Asp Phe Leu Lys Ala Gln Gln Lys Tyr Thr Asn Ile Val Lys Glu Met
      35             40             45
Lys Ala Lys Asp Leu Glu Ile Arg Ile His Lys Lys Lys Lys Cys Glu

```

```

      50              55              60
Ile Tyr Arg Arg Leu Arg Glu Leu Ala Lys Leu Tyr Asp Thr Ile Arg
65              70              75              80
Asn Glu Arg Asn Lys Phe Val Asn Leu Leu His Lys Ala His Gln Lys
      85              90              95
Val Asn Glu Ile Lys Glu Arg His Lys Met Ser Leu Asn Glu Leu Glu
      100              105              110
Ile Leu Arg Asn Ser Ala Val Ser Gln Glu Arg Lys Leu Gln Asn Ser
      115              120              125
Met Leu Lys His Ala Asn Asn Val Thr Ile Arg Glu Ser Met Gln Asn
      130              135              140
Asp Val Arg Lys Ile
145

```

```

<210> 849
<211> 463
<212> DNA
<213> Homo sapiens

```

```

<400> 849
nnacgcgtga ttgttggggc caaggaatgc catgtggaga gtgcaggtga agtgataagt
60
cttttggaga tggggaatgc agccagacat acaggtacca ctcaaataaa tgagcactcc
120
agcagatcac atgcaatttt tacaatcagc atttgtcaag ttcataaaaa tatggaggca
180
gctgaagatg gatcatggta ttcccctcgg catattgtct caaagttcca ctttgtggat
240
ttggcaggat cagaaagagt aaccaaaacg gggaataactg gtgaacgggt caaagaatcc
300
attcaaatca atagtggatt gctggcttta ggaaatgtaa taagcgctct tggggaccca
360
cgcaggaaga gttcacatat tccatatagg gatgctaaaa ttaccgggt tctgaaagat
420
tctctgggag gcagtgctaa gactgtcatg atcacatgtg tca
463

```

```

<210> 850
<211> 154
<212> PRT
<213> Homo sapiens

```

```

<400> 850
Xaa Arg Val Ile Val Gly Ala Lys Glu Cys His Val Glu Ser Ala Gly
1      5      10      15
Glu Val Ile Ser Leu Leu Glu Met Gly Asn Ala Ala Arg His Thr Gly
20     25     30
Thr Thr Gln Met Asn Glu His Ser Ser Arg Ser His Ala Ile Phe Thr
35     40     45
Ile Ser Ile Cys Gln Val His Lys Asn Met Glu Ala Ala Glu Asp Gly
50     55     60
Ser Trp Tyr Ser Pro Arg His Ile Val Ser Lys Phe His Phe Val Asp
65     70     75     80
Leu Ala Gly Ser Glu Arg Val Thr Lys Thr Gly Asn Thr Gly Glu Arg

```



[illegible]

```
<210> 851
<211> 372
<212> DNA
<213> Homo sapiens
```

```
<400> 851
aaatttctctg tttctgatcg acgaaataaa gtttagcgtg atgagtgagc tgcttatgca
60
gttcctccat tcgcttataa acagttttat ttctcatttc gaaaactctc gatgcagaat
120
aaaggctaga gtctggggac caagtcccca gtcctgttta cgcgacttcc ttgaccttgt
180
ttgttatgct gataaggtta ttcagcttga cgatttggtc gtggtcttcc aaccgttttg
240
cagctggctg acgatattcc tggtaggaac tacgatagaa gaccagcatc ggaagaactt
300
tgtagatgct gaacaaacac ccaccgatca cttcagcctc gaagtaaggg ttatactgtc
360
taacccacgc gt
372
```

```
<210> 852
<211> 110
<212> PRT
<213> Homo sapiens
```

```

<400> 852
Met Ser Glu Leu Leu Met Gln Phe Leu His Ser Leu Ile Asn Ser Phe
 1          5          10          15
Ile Ser His Phe Glu Asn Ser Arg Cys Arg Ile Lys Ala Arg Val Trp
          20          25          30
Gly Pro Ser Pro Gln Leu Arg Leu Arg Asp Phe Leu Asp Leu Val Cys
          35          40          45
Tyr Ala Asp Lys Val Ile Gln Leu Asp Asp Leu Phe Val Val Phe Gln
          50          55          60
Pro Phe Cys Ser Trp Ser Thr Ile Phe Leu Val Gly Thr Thr Ile Glu
65          70          75          80
Asp Gln His Arg Lys Asn Phe Val Asp Ala Glu Gln Thr Pro Thr Asp
          85          90          95
His Phe Ser Leu Glu Val Arg Val Ile Leu Ser Asn Pro Arg
          100          105          110

```

<210> 853  
<211> 423

<212> DNA

<213> Homo sapiens

<400> 853

```
acgcgttcag aaacttatgg tgaaatggcc gaactagaaa acctagtcga cgaatattac
60
caagctatgg gcatggatgt gcgtcgagaa acctggctgc gcgagcagat actcaagaaa
120
gtccaagaaa cgcatttggt agaagagctt gcaggcatag aatcagggtga tgatggcgca
180
gtgggtggaag agagcgtatt agaaggcctc gatacctatt tatgtgagat aaaagaagca
240
cagattcgtc atggattgca tcgtcttgga gaattaccag aagacgataa attggccgat
300
accttggtcg ccttattgcy tttaccccggt ggcagtgcaca ttaccagcaa ggaattttg
360
catgccttaa tggcagattt agagttagaa caagacgatt ttgacccaat gcaaagcacg
420
cgt
423
```

<210> 854

<211> 141

<212> PRT

<213> Homo sapiens

<400> 854

```
Thr Arg Ser Glu Thr Tyr Gly Glu Met Ala Glu Leu Glu Asn Leu Val
1           5           10           15
Asp Glu Tyr Tyr Gln Ala Met Gly Met Asp Val Arg Arg Glu Thr Trp
20           25           30
Leu Arg Glu Gln Ile Leu Lys Lys Val Gln Glu Thr His Leu Leu Glu
35           40           45
Glu Leu Ala Gly Ile Glu Ser Gly Asp Asp Gly Ala Val Val Glu Glu
50           55           60
Ser Val Leu Glu Gly Leu Asp Thr Tyr Leu Cys Glu Ile Lys Glu Ala
65           70           75           80
Gln Ile Arg His Gly Leu His Arg Leu Gly Glu Leu Pro Glu Asp Asp
85           90           95
Lys Leu Ala Asp Thr Leu Val Ala Leu Leu Arg Leu Pro Arg Gly Ser
100          105          110
Asp Ile Thr Ser Lys Gly Ile Leu His Ala Leu Met Ala Asp Leu Glu
115          120          125
Leu Glu Gln Asp Asp Phe Asp Pro Met Gln Ser Thr Arg
130          135          140
```

<210> 855

<211> 338

<212> DNA

<213> Homo sapiens

<400> 855

```
acgcgtgaag ggggagctca aagtagatgg acctctgact agatggagct ctgagtaaga
60
```

tgaatgtctg tgcggatgtt gctcacagca agatagtgtc tggagcgtt ggcacttcga  
 120  
 acaagatgga gcatggagca gatggagctc tgagcaagat ggagcgtgga gtagatagag  
 180  
 cttggagcaa gaaggagctc caagcaagat ggagcttgca gcagggtgctt ctcagtgtaa  
 240  
 gatggagctc agagaagatg atgctcagag taagattgag ctcggtgatt ggcactccaa  
 300  
 acattgctct gagcccattg gagnctctga gcagaaag  
 338

<210> 856

<211> 93

<212> PRT

<213> Homo sapiens

<400> 856

Met	Asn	Val	Cys	Ala	Asp	Val	Ala	His	Ser	Lys	Ile	Val	Leu	Gly	Ala
1				5					10				15		
Ile	Gly	Thr	Ser	Asn	Lys	Met	Glu	His	Gly	Ala	Asp	Gly	Ala	Leu	Ser
			20					25				30			
Lys	Met	Glu	Arg	Gly	Val	Asp	Arg	Ala	Trp	Ser	Lys	Lys	Glu	Leu	Gln
		35				40					45				
Ala	Arg	Trp	Ser	Leu	Gln	Gln	Val	Leu	Leu	Ser	Val	Arg	Trp	Ser	Ser
		50				55				60					
Glu	Lys	Met	Met	Leu	Arg	Val	Arg	Leu	Ser	Ser	Val	Ile	Gly	Thr	Pro
65				70					75						80
Asn	Ile	Ala	Leu	Ser	Pro	Leu	Glu	Xaa	Leu	Ser	Arg	Lys			
				85					90						

<210> 857

<211> 435

<212> DNA

<213> Homo sapiens

<400> 857

ccggacagtg ggccaccagt gtttgccccc agcaatcatg tcagtgaagc ccaacctcgg  
 60  
 gagacacccc ggcccctcat gcctcctacc aagcctttcc tagcacctga gaccaccagc  
 120  
 cctggtgaca ggggtggagac ccctgtgggg gagagagccc caaccctgt ctcagcaagc  
 180  
 tctgaggtct ccctgagag ccaagaggac tcagagaccc cagcagagga ggacagtggc  
 240  
 tctgagcagc ctcccaacag cgtcctgcct gacaaactga aggtgagctg ggagaacccc  
 300  
 agccccagg agggccctgc tgcagagagt gcagaaccgt cccaggcacc ctgttctgag  
 360  
 acttctgagg ctgccccag ggagggtggg aagcccccta caccaccacc caagatctta  
 420  
 tcagagaaac tgaaa  
 435

<210> 858

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 858

```

Pro Asp Ser Gly Pro Pro Val Phe Ala Pro Ser Asn His Val Ser Glu
 1           5           10           15
Ala Gln Pro Arg Glu Thr Pro Arg Pro Leu Met Pro Pro Thr Lys Pro
          20           25           30
Phe Leu Ala Pro Glu Thr Thr Ser Pro Gly Asp Arg Val Glu Thr Pro
          35           40           45
Val Gly Glu Arg Ala Pro Thr Pro Val Ser Ala Ser Ser Glu Val Ser
          50           55           60
Pro Glu Ser Gln Glu Asp Ser Glu Thr Pro Ala Glu Glu Asp Ser Gly
65           70           75           80
Ser Glu Gln Pro Pro Asn Ser Val Leu Pro Asp Lys Leu Lys Val Ser
          85           90           95
Trp Glu Asn Pro Ser Pro Gln Glu Ala Pro Ala Ala Glu Ser Ala Glu
          100          105          110
Pro Ser Gln Ala Pro Cys Ser Glu Thr Ser Glu Ala Ala Pro Arg Glu
          115          120          125
Gly Gly Lys Pro Pro Thr Pro Pro Pro Lys Ile Leu Ser Glu Lys Leu
          130          135          140
Lys
145

```

&lt;210&gt; 859

&lt;211&gt; 561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 859

```

nacgcgtgggt gtggtaatcc ggtttctgggt ggcgacggct gccacccctc gtggcaagac
60
atgccgttgc gtgccgatat gccatacgaa gcttggccta gtgcgaaaag ctcgctggaa
120
ccctcgaaga ggcagggctcg gcagggttacc gtggtcgggtg tacgcatcgt ttcgacgatg
180
aaccaccattc tgggagcaga tatgacgacg taccagtacc tcattgtcgg tggcggggatg
240
gccgctgatt ctgccgcccg cggtatccgc gacatcgaca agaaagggtc gatcgccatc
300
ctcagcgctg acgtcgacgc cccgtatcct cggccagcgc tgagcaagaa gctgtggact
360
gaccctgagt tcacctggga ccaggctgac cttgctactg tcgctgacac cggcgcgga
420
ttgcggctcg gcactgaggt gctcagcatt gaccgtgacg gcaagaccgt cctgaccgct
480
tccggccagg tattcggcta ccagaagttg ctgctcgta ccggccttac cccgtcgcgc
540
attgacgacg acggcgatgc c
561

```

&lt;210&gt; 860

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 860

```

Xaa Ala Trp Cys Gly Asn Pro Val Ser Gly Gly Asp Gly Cys His Pro
 1           5           10           15
Ser Trp Gln Asp Met Pro Leu Arg Ala Asp Met Pro Tyr Glu Ala Trp
      20           25           30
Pro Ser Ala Lys Ser Ser Leu Glu Pro Ser Lys Arg Gln Gly Arg Gln
      35           40           45
Val Thr Val Val Gly Val Arg Ile Val Ser Thr Met Asn Pro Ile Leu
      50           55           60
Gly Ala Asp Met Thr Thr Tyr Gln Tyr Leu Ile Val Gly Gly Gly Met
65           70           75           80
Ala Ala Asp Ser Ala Ala Arg Gly Ile Arg Asp Ile Asp Lys Lys Gly
      85           90           95
Ser Ile Ala Ile Leu Ser Ala Asp Val Asp Ala Pro Tyr Pro Arg Pro
      100          105          110
Ala Leu Ser Lys Lys Leu Trp Thr Asp Pro Glu Phe Thr Trp Asp Gln
      115          120          125
Val Asp Leu Ala Thr Val Ala Asp Thr Gly Ala Glu Leu Arg Leu Gly
      130          135          140
Thr Glu Val Leu Ser Ile Asp Arg Asp Gly Lys Thr Val Leu Thr Ala
145          150          155          160
Ser Gly Gln Val Phe Gly Tyr Gln Lys Leu Leu Leu Val Thr Gly Leu
      165          170          175
Thr Pro Ser Arg Ile Asp Asp Asp Gly Asp Ala
      180          185

```

&lt;210&gt; 861

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 861

```

ccatggggtt ctatgctctg aggtttcatc tgtggggaac agtattgact tacttacaaa
60
gagataatgg tcatacccta tggtcactca ccatagtctg gcggtacatg gactttctcag
120
ccccagtaag atctgtatcc acaggacact taaagtcacc ttacagaggg ctatcccagt
180
gcctgaggcc tattagaggc gtctcttttc agccatcagt gttagaggcc atctgcatgg
240
gatcccagag cctgcctcgg gaatggcaga agctggctgg tgcttggcgt gggctttgcc
300
tgtttctactg ctttcagggg ggccctgccac aggggagaaa ctgggggggg ga
352

```

&lt;210&gt; 862

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 862

```

Met Gly Phe Tyr Ala Leu Arg Phe His Leu Trp Gly Thr Val Leu Thr
 1           5           10           15
Tyr Leu Gln Arg Asp Asn Gly His Thr Leu Trp Ser Leu Thr Ile Val
          20           25           30
Trp Arg Tyr Met Asp Phe Ser Ala Pro Val Arg Ser Val Ser Thr Gly
          35           40           45
His Leu Lys Ser Pro Tyr Arg Gly Leu Ser Gln Cys Leu Arg Pro Ile
          50           55           60
Arg Gly Val Ser Phe Gln Pro Ser Val Leu Glu Ala Ile Cys Met Gly
65           70           75           80
Ser Gln Ser Leu Pro Arg Glu Trp Gln Lys Leu Ala Gly Ala Trp Arg
          85           90           95
Gly Leu Cys Leu Phe His Cys Phe Gln Gly Gly Leu Pro Gln Gly Arg
          100          105          110
Asn Trp Gly Gly
          115

```

&lt;210&gt; 863

&lt;211&gt; 327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 863

```

tccggatcga cccggacgaa ttccacggtc cagccattga cttccaaatg ctctttgaca
60
tacgccgtga catgttcaat gtccaactta cgcattgtcca cccgctcacc ggtctcattg
120
agtttgagct gcgagtagac gttgcggttag ttctcggttga ccgactgctc atacgagatg
180
tgcagaagca tcggtttgcg gccatcctcg gacggcattg gcttggttga catggccgct
240
tggcggaaca tgttcagggt aaagcccgcac ttgaagttgt gcgacagggc agaaacacac
300
agcatttctg accggcgatg acccatn
327

```

&lt;210&gt; 864

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 864

```

Met Gly His Arg Arg Ser Glu Met Leu Cys Val Ser Ala Leu Ser His
 1           5           10           15
Asn Phe Lys Ser Gly Phe Thr Leu Asn Met Phe Arg Gln Ala Ala Met
          20           25           30
Tyr Asn Lys Pro Met Pro Ser Glu Asp Gly Arg Lys Pro Met Leu Leu
          35           40           45
His Ile Ser Tyr Glu Gln Ser Val Asn Glu Asn Tyr Arg Asn Val Tyr
          50           55           60
Ser Gln Leu Lys Leu Asn Glu Thr Gly Glu Arg Val Asp Met Arg Lys
65           70           75           80
Leu Asp Ile Glu His Val Thr Ala Tyr Val Lys Glu His Leu Glu Val

```

85 90 95  
 Asn Gly Trp Thr Val Glu Phe Val Arg Val Asp Pro  
 100 105

<210> 865  
 <211> 729  
 <212> DNA  
 <213> Homo sapiens

<400> 865  
 acgcgtcatc ctcattcaag aggccccagga ggagcaccac cctccgcata ttgcgcgtgc  
 60  
 agctctcgtt ctgggtctctg agcatgccc a cggcgctctg cacacagctt ctcagcagcc  
 120  
 tgggtggtgtc caggatcgac acatcactgc ctccgagttc agaggtttcc tttcccacct  
 180  
 tctcagaact ttctgtttcc atggcctcct ctgccacctc tgccacctcc cctgatgtgc  
 240  
 tggcctccgt ctccatcgcc tcctcatggc cgtcttccgc ccggtgttcc aagcccagct  
 300  
 caggcaagtc tccgggcgcg aacagctggc tgatggtgac atgctgcagc ctggtcacat  
 360  
 cagaaacat gaggtggat ctccggaggt catcgatgtg gacagactgc cacagccctc  
 420  
 cgtggaagcc cacatagget gttcctcttc ccacccggga cagttttgtg atgaaataga  
 480  
 cgaagatacg gtcctcatth tctcgtatth tgttgatttc atttataaca gaatacttag  
 540  
 ctgaggcaat gagctgggcg ctacggattc catcttcaaa atctgtctga aaaatgagga  
 600  
 ttttacatth ggctgtattc gttaaacagt ttcggacttc tttgaggaat gagtactcgg  
 660  
 tgtcaaaactg ctgcagccac aggagtgtgg gtttcggagc cctgcctgtg acctctgatt  
 720  
 ctaaaattt  
 729

<210> 866  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 866  
 Ala Cys Pro Arg Arg Ser Ala His Ser Phe Ser Ala Ala Trp Trp Cys  
 1 5 10 15  
 Pro Gly Ser Thr His His Cys Leu Arg Val Gln Arg Phe Pro Phe Pro  
 20 25 30  
 Pro Ser Gln Asn Phe Leu Phe Pro Trp Pro Pro Leu Pro Pro Leu Pro  
 35 40 45  
 Pro Pro Leu Met Cys Trp Pro Pro Ser Pro Ser Pro Pro His Gly Arg  
 50 55 60  
 Leu Pro Pro Gly Val Pro Ser Pro Ala Gln Ala Ser Leu Arg Ala Arg  
 65 70 75 80  
 Thr Ala Gly

<210> 867  
 <211> 640  
 <212> DNA  
 <213> Homo sapiens

<400> 867  
 nntccggaac atcaagatcc aggcgcagaa gaccgtcaga agctgcactg gccacctcct  
 60  
 tcaggtggac tctcgttggg ggccggcgtc gctggccccc tcgcaccggg tcccgtgtca  
 120  
 catgctccag ggccgagctc ttgtccacct ttacctcatc gaaagccttg tttttgcctc  
 180  
 ggtaaatccc ttcattgagg gctttgatcc aggattcctt ctctctcccc gtgggtgcct  
 240  
 ggaatttgat gtcgctgacc ttgttccttg gggatcgcag caggataaag cggtgttttc  
 300  
 gcttgaggag ggcacgaagg tcctggcact tctcatagct gccagctcc acagtctcca  
 360  
 cacacttctg atcatcctca ttctcataga ccagcagctg ggccctggcag aggagcagat  
 420  
 atcggctctt ccagaaaccc aggaggcccc cactgctctt cttgatccag ccagccttgt  
 480  
 ccaccatctg tgtccccga ggcttctcac cggcttcctt cacacctctc tcctccatgg  
 540  
 cgagtcgcc gaggtccgc cgctccgcc ctcgcttcca gcgccgcgcg ggctctgcc  
 600  
 ccgcgtctac gcccgccag gcggcgactc tccgcgttct  
 640

<210> 868  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<400> 868  
 Gly Gly His Glu Gly Pro Gly Thr Ser His Ser Cys Pro Ala Pro Gln  
 1 5 10 15  
 Ser Pro His Thr Ser Asp His Pro His Ser His Arg Pro Ala Ala Gly  
 20 25 30  
 Pro Gly Arg Gly Ala Asp Ile Gly Leu Ser Arg Asn Pro Gly Gly Pro  
 35 40 45  
 His Cys Ser Ser  
 50

<210> 869  
 <211> 321  
 <212> DNA  
 <213> Homo sapiens

<400> 869  
 ngggtgatgc tgctcgcggc attgagcatc tttgtgtca gcgcgctgtt tatcgacaac  
 60



ttccctgtcgc cgctgaatat ggcggggctg ggccctggcga tttcgacggt gggcatcgct  
 120  
 gcgtgcacca tgctgttctg cctggcgctg gggcatttcg acttgctcggg gggctcgggtg  
 180  
 atcgccctgtg ccggtgtggt cgcggggatt gtgattcgtg acaccgatag cgtggcactc  
 240  
 ggcggtgtccg ctgcgttggc catgggcctg gtagtggggc tgatcaacgg catcgtgatc  
 300  
 gccaaagctgc gcatcaacgc g  
 321

<210> 870

<211> 107

<212> PRT

<213> Homo sapiens

<400> 870

Xaa	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Ile	Phe	Val	Leu	Ser	Ala	Leu
1				5					10					15	
Phe	Ile	Asp	Asn	Phe	Leu	Ser	Pro	Leu	Asn	Met	Arg	Gly	Leu	Gly	Leu
			20					25					30		
Ala	Ile	Ser	Thr	Val	Gly	Ile	Ala	Ala	Cys	Thr	Met	Leu	Phe	Cys	Leu
			35				40					45			
Ala	Ser	Gly	His	Phe	Asp	Leu	Ser	Val	Gly	Ser	Val	Ile	Ala	Cys	Ala
	50					55				60					
Gly	Val	Val	Ala	Gly	Ile	Val	Ile	Arg	Asp	Thr	Asp	Ser	Val	Ala	Leu
65					70				75					80	
Gly	Val	Ser	Ala	Ala	Leu	Ala	Met	Gly	Leu	Val	Val	Gly	Leu	Ile	Asn
			85					90					95		
Gly	Ile	Val	Ile	Ala	Lys	Leu	Arg	Ile	Asn	Ala					
			100					105							

<210> 871

<211> 320

<212> DNA

<213> Homo sapiens

<400> 871

agatcttcag agtcctcgtc ttttaaattgg gggtaacagc agcaagtcct cagaggtgtc  
 60  
 ctgagcctca aaacacatcc tggtttgtaa cgtccgcagc ctcagcaggg gctaggcaca  
 120  
 gaacaagcat tcaggacctg gaaggtacca gcgacacctg gtcctccctt cccaggcaca  
 180  
 aggcagcccc tctccattca agctctgccc cagcccagca aagagagggg tctcagcca  
 240  
 ctgccccac cactaccaca atcatactca cctctcctgg tccatacgtg acaaaggacc  
 300  
 tgccacggcc aggagacaa  
 320

<210> 872

<211> 98

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 872

```

Met Gly Val Thr Ala Ala Ser Pro Gln Arg Cys Pro Glu Pro Gln Asn
 1           5           10           15
Thr Ser Trp Phe Val Thr Ser Ala Ala Ser Ala Gly Ala Arg His Arg
 20           25           30
Thr Ser Ile Gln Asp Leu Glu Gly Thr Ser Asp Thr Trp Ser Ser Leu
 35           40           45
Pro Arg His Lys Ala Ala Pro Leu His Ser Ser Ser Ala Pro Ala Gln
 50           55           60
Gln Arg Glu Gly Ser Ser Ala Thr Ala Pro Thr Thr Thr Thr Ile Ile
 65           70           75           80
Leu Thr Ser Pro Gly Pro Tyr Val Thr Lys Asp Leu Pro Arg Pro Gly
 85           90           95
Arg Gln

```

&lt;210&gt; 873

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 873

```

nttgtttagc atcgtttttt acgggtgtat cagcgcgttt agcagcgttt ttagcggatg
60
catcagcatg ttttgcgtca cgttttacaa ctgtgctacc gtgttttagca tcatttttga
120
cggaggatc aatacgttta gcatcgtttt taacagatgt atcaacacgg ggttcatccg
180
cttttagcaga atccccagct ctagtagcca ctttagatac ttcagatttt atatgagtcg
240
cagttgtttc agcgtgagcc atgctgaatg tagaaccaag ggccaatgta attgctaaag
300
acaaagataa tttatttagt ttcattgttc gagagaagtg tgcgaattcg gcgatacagt
360
cag
363

```

&lt;210&gt; 874

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 874

```

Met Lys Leu Asn Lys Leu Ser Leu Ser Leu Ala Ile Thr Leu Ala Leu
 1           5           10           15
Gly Ser Thr Phe Ser Met Ala His Ala Glu Thr Thr Ala Thr His Ile
 20           25           30
Lys Ser Glu Val Ser Lys Val Ala Thr Arg Ala Gly Asp Ser Ala Lys
 35           40           45
Ala Asp Glu Pro Arg Val Asp Thr Ser Val Lys Asn Asp Ala Lys Arg
 50           55           60
Ile Asp Thr Ser Val Lys Asn Asp Ala Lys His Gly Ser Thr Val Val

```

65					70					75					80
Lys	Arg	Asp	Ala	Lys	His	Ala	Asp	Ala	Ser	Ala	Lys	Asn	Ala	Ala	Lys
				85					90						95
Arg	Ala	Asp	Thr	Pro	Val	Lys	Asn	Asp	Ala	Lys	Gln				
			100					105							

<210> 875

<211> 355

<212> DNA

<213> Homo sapiens

<400> 875

```

acgcgtgaag gggaccctaa ctcgctctggg ctgtaggatg cgggcgaggc ttccacaaac
60
tcactgtctg ggggagaaga aaagcagaaa acaactcgaa tcgctaccat tcaggacgaa
120
cccgccaagc accagctcaa gcgcagggtc ccgggaaaaa gcgcggggctt ctctctccca
180
gcgctcagaa tccttgagcc ggaggccccg cgggattcag accgccagat cccagggag
240
tgacaaatcg ccgcagaaac ttgggggaca actcggccct ggcaccgcgc ggcttcagg
300
cgcgggcagg cgcgcgccaa ctttccccgc gtgccacccc gcggctcccc cggen
355

```

<210> 876

<211> 106

<212> PRT

<213> Homo sapiens

<400> 876

Met	Arg	Ala	Arg	Leu	Pro	Gln	Thr	His	Cys	Leu	Gly	Glu	Lys	Lys	Ser
1				5					10					15	
Arg	Lys	Gln	Leu	Glu	Ser	Leu	Pro	Phe	Arg	Thr	Asn	Pro	Pro	Ser	Thr
			20					25					30		
Ser	Ser	Ser	Ala	Gly	Pro	Arg	Glu	Lys	Ala	Arg	Ala	Ser	Leu	Ser	Gln
		35					40					45			
Arg	Ser	Glu	Ser	Leu	Ser	Arg	Arg	Pro	Arg	Gly	Ile	Gln	Thr	Ala	Arg
	50					55					60				
Ser	Pro	Gly	Ser	Asp	Lys	Ser	Pro	Gln	Lys	Leu	Gly	Gly	Gln	Leu	Gly
65					70					75				80	
Pro	Gly	Thr	Ala	Arg	Leu	Pro	Gly	Ala	Gly	Arg	Arg	Ala	Pro	Thr	Phe
				85					90					95	
Pro	Ala	Cys	His	Pro	Ala	Ala	Pro	Pro	Ala						
			100					105							

<210> 877

<211> 487

<212> DNA

<213> Homo sapiens

<400> 877

acgcgtactt tgggtaatga actgacgacc gctgagatcg actgccttta tctgtgttac  
60

caatccacct atgctaaacg tggtcagcaa gggtatctca cacgagaatt ctttggtttg  
 120  
 ttggccaata ccatgggaga tcaaattcctt ttagtacagg cgtacagaga aggcgaagcg  
 180  
 atcgccgcgt cgtgggtgttt ctttgatgat cattcactat atgggcgtta ttggggctgt  
 240  
 atggaagaag tggattgcct gcattttgaa gcttggtatt accaaggaat cgagttttgt  
 300  
 ctcgaaaaag gggtacagca tttcgatccg ggtacacaag gggaacacaa gattgcgcgc  
 360  
 ggctttgaac ctgttttttag ccacagcgtg cattacattg ctcacaaagg ttttcgtgaa  
 420  
 gcgattggga atttctgtga ggaagaagcg caagctgtgc gcgagtatca tcaagatacc  
 480  
 cacgcgt  
 487

<210> 878  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<400> 878  
 Thr Arg Thr Leu Gly Asn Glu Leu Thr Thr Ala Glu Ile Asp Cys Leu  
 1 5 10 15  
 Tyr Leu Cys Tyr Gln Ser Thr Tyr Ala Lys Arg Gly Gln Gln Gly Tyr  
 20 25 30  
 Leu Thr Arg Glu Phe Phe Gly Leu Leu Ala Asn Thr Met Gly Asp Gln  
 35 40 45  
 Ile Leu Leu Val Gln Ala Tyr Arg Glu Gly Glu Ala Ile Ala Ala Ser  
 50 55 60  
 Trp Cys Phe Phe Asp Asp His Ser Leu Tyr Gly Arg Tyr Trp Gly Cys  
 65 70 75 80  
 Met Glu Glu Val Asp Cys Leu His Phe Glu Ala Cys Tyr Tyr Gln Gly  
 85 90 95  
 Ile Glu Phe Cys Leu Glu Lys Gly Leu Gln His Phe Asp Pro Gly Thr  
 100 105 110  
 Gln Gly Glu His Lys Ile Ala Arg Gly Phe Glu Pro Val Phe Ser His  
 115 120 125  
 Ser Val His Tyr Ile Ala His Gln Gly Phe Arg Glu Ala Ile Gly Asn  
 130 135 140  
 Phe Cys Glu Glu Glu Ala Gln Ala Val Arg Glu Tyr His Gln Asp Thr  
 145 150 155 160  
 His Ala

<210> 879  
 <211> 993  
 <212> DNA  
 <213> Homo sapiens

<400> 879  
 nnccttagcat ttaagccaac gaggcagcta atgtcctctg aacagcaaag gaaattcagc  
 60

agccagtgcca gtagggctct gacccctcct tcctacagta ctgctaaaaa ttcattggga  
 120  
 tcaagatcca gtgaatcctt tgggaagtac acatcgccag taatgagtga gcatggggac  
 180  
 gagcacaggc agctcctctc tcacccaatg caaggccctg gactccgtgc agctacctca  
 240  
 tccaaccact ctgtggacga gcaactgaag aatactgaca cgcacctcat cgacctggta  
 300  
 accaatgaga ttatcaccca aggacctcca gtggactgga atgacattgc tgggtctcgac  
 360  
 ctggtgaagg ctgtcattaa agaggagggtt ttatggccag tgttgaggtc agacgcgttc  
 420  
 agtggactga cggccttacc tcggagcatt cttttatttg gacctcgggg gacaggcaaa  
 480  
 acattattgg gcagatgcat cgctagtcag ctgggggcca catttttcaa aattgccggt  
 540  
 tctggactag tcgccaagggt gttaggagaa gcagagaaaa ttatccatgc ctcttttctt  
 600  
 gtggccaggt gtcgccagcc ctccgtgatt tttgttagtg acattgacat gcttctctcc  
 660  
 tctcaagtga atgaggaaca tagtccagtc agtcggatga gaaccgaatt tctgatgcaa  
 720  
 ctggacactg tactaacttc ggctgaggac caaatcgtag taatttgtgc caccagtaaa  
 780  
 ccagaagaaa tagatgaatc ccttcggagg tacttcatga aacgactttt aatccccactt  
 840  
 cctgacagca cagcgaggca ccagataata gtacaactgc tctcacagca caattactgt  
 900  
 ctcaatgaca aggagtttgc actgctcgtc cagcgcacag aaggcttttc tggactagat  
 960  
 gtggctcatt tgtgtcagga agcagtgggtg ggc  
 993

<210> 880

<211> 331

<212> PRT

<213> Homo sapiens

<400> 880

Xaa	Leu	Ala	Phe	Lys	Pro	Thr	Arg	Gln	Leu	Met	Ser	Ser	Glu	Gln	Gln
1				5				10					15		
Arg	Lys	Phe	Ser	Ser	Gln	Ser	Ser	Arg	Ala	Leu	Thr	Pro	Pro	Ser	Tyr
			20					25				30			
Ser	Thr	Ala	Lys	Asn	Ser	Leu	Gly	Ser	Arg	Ser	Ser	Glu	Ser	Phe	Gly
		35					40					45			
Lys	Tyr	Thr	Ser	Pro	Val	Met	Ser	Glu	His	Gly	Asp	Glu	His	Arg	Gln
		50					55				60				
Leu	Leu	Ser	His	Pro	Met	Gln	Gly	Pro	Gly	Leu	Arg	Ala	Ala	Thr	Ser
65					70					75				80	
Ser	Asn	His	Ser	Val	Asp	Glu	Gln	Leu	Lys	Asn	Thr	Asp	Thr	His	Leu
				85					90					95	
Ile	Asp	Leu	Val	Thr	Asn	Glu	Ile	Ile	Thr	Gln	Gly	Pro	Pro	Val	Asp
			100					105					110		
Trp	Asn	Asp	Ile	Ala	Gly	Leu	Asp	Leu	Val	Lys	Ala	Val	Ile	Lys	Glu

		115					120					125					
Glu	Val	Leu	Trp	Pro	Val	Leu	Arg	Ser	Asp	Ala	Phe	Ser	Gly	Leu	Thr		
	130					135					140						
Ala	Leu	Pro	Arg	Ser	Ile	Leu	Leu	Phe	Gly	Pro	Arg	Gly	Thr	Gly	Lys		
145					150					155					160		
Thr	Leu	Leu	Gly	Arg	Cys	Ile	Ala	Ser	Gln	Leu	Gly	Ala	Thr	Phe	Phe		
				165					170					175			
Lys	Ile	Ala	Gly	Ser	Gly	Leu	Val	Ala	Lys	Gly	Leu	Gly	Glu	Ala	Glu		
			180					185					190				
Lys	Ile	Ile	His	Ala	Ser	Phe	Leu	Val	Ala	Arg	Cys	Arg	Gln	Pro	Ser		
		195					200				205						
Val	Ile	Phe	Val	Ser	Asp	Ile	Asp	Met	Leu	Leu	Ser	Ser	Gln	Val	Asn		
	210					215				220							
Glu	Glu	His	Ser	Pro	Val	Ser	Arg	Met	Arg	Thr	Glu	Phe	Leu	Met	Gln		
225					230					235					240		
Leu	Asp	Thr	Val	Leu	Thr	Ser	Ala	Glu	Asp	Gln	Ile	Val	Val	Ile	Cys		
				245					250					255			
Ala	Thr	Ser	Lys	Pro	Glu	Glu	Ile	Asp	Glu	Ser	Leu	Arg	Arg	Tyr	Phe		
			260					265					270				
Met	Lys	Arg	Leu	Leu	Ile	Pro	Leu	Pro	Asp	Ser	Thr	Ala	Arg	His	Gln		
		275					280					285					
Ile	Ile	Val	Gln	Leu	Leu	Ser	Gln	His	Asn	Tyr	Cys	Leu	Asn	Asp	Lys		
	290					295					300						
Glu	Phe	Ala	Leu	Leu	Val	Gln	Arg	Thr	Glu	Gly	Phe	Ser	Gly	Leu	Asp		
305					310					315					320		
Val	Ala	His	Leu	Cys	Gln	Glu	Ala	Val	Val	Gly							
				325					330								

<210> 881

**<211> 313**

<212> DNA

<213> Homo sapiens

<400> 881

cgcggtgagcg tcgacaatgc tccaggaacc ggtgtgtatg aggccgggga ttctaccggt  
60

cgtaggtttgc agggcatgcg tgagcgcgcc cgtatccatg gcggcaccgc gcgctggggc  
120

gactcgcagt attatgaagg cggtttcaac gtcacggtgg agattccaac atgagcggcc  
180

aaaggatgaa catggacacg acgcgcccc aacacggctcg gggcttgccg acgatcagcc  
240

ggctgggtgc gcaccggttt tgccatggtg ctggattcgc aggacgacat cacggtggcc  
300

tggcaagccg acn

313

<210> 882

<211> 57

<212> PRT

<213> Homo sapiens

<400> 882

Arg Val Ser Val Asp Asn Ala Pro Gly Thr Gly Val Tyr Glu Ala Gly

```

      1             5             10             15
Asp Ser Thr Gly Arg Gly Leu Gln Gly Met Arg Glu Arg Ala Arg Ile
      20             25             30
His Gly Gly Thr Ala Arg Trp Gly Asp Ser Gln Tyr Tyr Glu Gly Gly
      35             40             45
Phe Asn Val Thr Val Glu Ile Pro Thr
      50             55

```

<210> 883  
 <211> 576  
 <212> DNA  
 <213> Homo sapiens

```

<400> 883
naattaagat ctgggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag
60
tcctcactga ccaaggcaag ccatgcttct gagtgcttga ggccaccgaa atgaacaaat
120
ggaaaacact cccatctttt tcaagcctac cttttagcag aagaggcaga tacacaagcc
180
ctaaagatgt aacatcaggc tgagtggagg aaggctgaga agaaaaataa agcaggctca
240
ggaggagaga gtgatgtcag gatgcccttg tgcttactcc agcctccttg tgaaaaccca
300
gtctctctgt ctcccagtga agacttggat ggcagccatc agggaaggct gggctccagc
360
tgaggagtatg ggtgtgagct ctatagacca tcctctcttg caatcaataa acacttgctt
420
gtgaaagagg cccaagccac catccgcattg gacaccagtg caagtggccc caccgcctg
480
gtcctcagtg actgtgccac cagccatggg agcctgcgca tccaactgct gcataagctc
540
tccttctctgg tgaacgcctt agctaagcag gtcattg
576

```

<210> 884  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

```

<400> 884
Met Pro Leu Cys Leu Leu Gln Pro Pro Cys Glu Asn Pro Ala Leu Leu
      1             5             10             15
Ser Pro Ser Glu Asp Leu Asp Gly Ser His Gln Gly Arg Leu Gly Pro
      20             25             30
Ser Trp Glu Tyr Gly Cys Glu Leu Tyr Arg Pro Ser Leu Ser Ala Ile
      35             40             45
Asn Lys His Leu Pro Val Lys Glu Ala Gln Ala Thr Ile Arg Met Asp
      50             55             60
Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys Ala Thr
      65             70             75             80
Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu
      85             90             95
Val Asn Ala Leu Ala Lys Gln Val Met

```

100

105

&lt;210&gt; 885

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 885

actagtggcg cccatcatccg ggccgctgtc ccgctctcgg agtcgggtgc gttggagtcc  
60

ggtgaggcga tgctgacgaa cgacacaccg gtgacttggg atggcgaggaa agtacggggc  
120

aggcggtgtg cgcgcctcgg tgcgacgag ttgtcgtcga ccccggtccg cccagatccg  
180

gtacgggctc gccacgtggc gctggaagca gtgaggtctg ggggacttga cgtagcgagc  
240

ctgacgaaga acggtgaatc tttgcgacgc cgtcttgccc tggcccatcg ggtgtttggt  
300

gatccctggc ccgatgtcag cgatgaggct ctgctagcct gcgccgagga gtggcttgac  
360

ctcgacgcgt

370

&lt;210&gt; 886

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 886

Thr Ser Gly Ala Leu Ile Arg Ala Ala Val Pro Leu Ser Glu Ser Ala  
1 5 10 15

Ala Leu Glu Ser Gly Glu Ala Met Leu Thr Asn Asp Thr Pro Val Thr  
20 25 30

Trp Asp Gly Gly Lys Val Arg Gly Arg Arg Val Ser Arg Leu Gly Ala  
35 40 45

Ile Glu Leu Ser Ser Thr Pro Val Arg Pro Asp Pro Val Arg Ala Arg  
50 55 60

His Val Ala Leu Glu Ala Val Arg Ser Gly Gly Leu Asp Val Ala Ser  
65 70 75 80

Leu Thr Lys Asn Gly Glu Ser Leu Arg Arg Arg Leu Ala Leu Ala His  
85 90 95

Arg Val Phe Gly Asp Pro Trp Pro Asp Val Ser Asp Glu Ala Leu Leu  
100 105 110

Ala Cys Ala Glu Glu Trp Leu Asp Leu Asp Ala  
115 120

&lt;210&gt; 887

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 887

cagggcggtg cgctcggtcg cgtgctgccg atgggtcatgc tcggaggctt aaccgccatc  
60



attatctccg gctgcctgaa ccagcttggt aaacgctatc cgcattctgac cggcgaaggc  
 120  
 caactgatgc caaacctgac taatgctgat accacggctt cccaaccggc gttctccggt  
 180  
 aaagcggacg tgaccacat tgcctccggc gcgttgctgg ccgtgctgct ttacatgggtg  
 240  
 ggtaggttggt ttcacaagtt gattggcctg cctgctccgg ttggcatgtt gtttgtggcg  
 300  
 gtgctggtca aactgtgcaa cggcgttctt ccccgctgc tcgaaggctc gcaggtggtt  
 360  
 tacaaattct tccagacctc cgtcacctat ccgattctgt tcgccgttgg cgtggcgatt  
 420  
 acgccgtggc aggaactggt caacgcg  
 447

<210> 888

<211> 149

<212> PRT

<213> Homo sapiens

<400> 888

Gln	Gly	Val	Ala	Leu	Gly	Arg	Val	Leu	Pro	Met	Val	Met	Leu	Gly	Gly
1				5				10					15		
Leu	Thr	Ala	Ile	Ile	Ile	Ser	Gly	Cys	Leu	Asn	Gln	Leu	Gly	Lys	Arg
			20				25					30			
Tyr	Pro	His	Leu	Thr	Gly	Glu	Gly	Gln	Leu	Met	Pro	Asn	Arg	Ala	Asn
		35				40					45				
Ala	Asp	Thr	Thr	Ala	Ser	Gln	Pro	Ala	Phe	Ser	Gly	Lys	Ala	Asp	Val
	50				55				60						
Thr	Thr	Ile	Ala	Ser	Gly	Ala	Leu	Leu	Ala	Val	Leu	Leu	Tyr	Met	Val
65				70				75					80		
Gly	Arg	Leu	Val	His	Lys	Leu	Ile	Gly	Leu	Pro	Ala	Pro	Val	Gly	Met
			85				90						95		
Leu	Phe	Val	Ala	Val	Leu	Val	Lys	Leu	Cys	Asn	Gly	Ala	Ser	Pro	Arg
		100					105					110			
Leu	Leu	Glu	Gly	Ser	Gln	Val	Val	Tyr	Lys	Phe	Phe	Gln	Thr	Ser	Val
		115				120						125			
Thr	Tyr	Pro	Ile	Leu	Phe	Ala	Val	Gly	Val	Ala	Ile	Thr	Pro	Trp	Gln
	130					135					140				
Glu	Leu	Val	Asn	Ala											
145															

<210> 889

<211> 450

<212> DNA

<213> Homo sapiens

<400> 889

ggtaccaccc cacacctgac aagaggtggc cagggaggaa gggaggggtc ttacctcccc  
 60  
 atctcccctc agtaaaattc aggatgccca gtgaagtttg aatgtcagat aaacaatttg  
 120  
 ttagtataag gatgtacctc gcattgaaat gatgccttgt aatttactaa atctgcaact  
 180

atgcagcctt atttcatggc gggcagtggc ggtgatccca ggtttcaggg gcggggaagg  
 240  
 gtgctgggga gacctgagg tcaggaaccc gtacacctct gcttctgccc tctcttcct  
 300  
 gtgccggcca caaggcaatg actcctgtgt gggcgcagag gcagaaatgg gtctggaagg  
 360  
 ggattcccag tgtctggcaa gttctggtaa attctgcatt ggaggttctc tctgtagtaa  
 420  
 ggggagttgg cctggccgcc cttcacgcgt  
 450

<210> 890

<211> 100

<212> PRT

<213> Homo sapiens

<400> 890

Met	Met	Pro	Cys	Asn	Leu	Leu	Asn	Leu	Gln	Leu	Cys	Ser	Leu	Ile	Ser
1				5					10					15	
Trp	Arg	Ala	Val	Ala	Val	Ile	Pro	Gly	Phe	Arg	Gly	Gly	Glu	Gly	Cys
			20					25					30		
Trp	Gly	Asp	Pro	Glu	Val	Arg	Asn	Pro	Tyr	Thr	Ser	Ala	Ser	Ala	Leu
		35					40					45			
Ser	Ser	Leu	Cys	Arg	Pro	Gln	Gly	Asn	Asp	Ser	Cys	Val	Gly	Ala	Glu
	50					55					60				
Ala	Glu	Met	Gly	Leu	Glu	Gly	Asp	Ser	Gln	Cys	Leu	Ala	Ser	Ser	Gly
65					70				75					80	
Lys	Phe	Cys	Ile	Gly	Gly	Ser	Leu	Cys	Ser	Lys	Gly	Ser	Trp	Pro	Gly
			85					90						95	
Arg	Pro	Ser	Arg												
			100												

<210> 891

<211> 318

<212> DNA

<213> Homo sapiens

<400> 891

nncaccgtcc ccgtactgga tccgcgcgag gatttcgccg actgcatgca cattgacgta  
 60  
 ctggatccct tccacactga caacaccagt gagcacagtg acctggccac agatggccag  
 120  
 actaacggcc cggctgatag cgggactggc acccactctg agcagggaaa ctccgacata  
 180  
 tctagccccc tcagctctag tgacgtgct aacaccaccg acagcactgc tggcaatacc  
 240  
 ggtgaaggta ctgccgcgaa tatgcctggg gacatggctc attcttcgac ggctaccac  
 300  
 ccctatgcaa gcaccggt  
 318

<210> 892

<211> 106

<212> PRT

<213> Homo sapiens

<400> 892

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Xaa Thr Val Pro Val Leu Asp Pro Arg Glu Asp Phe Ala Asp Cys Met
 1           5           10           15
His Ile Asp Val Leu Asp Pro Phe His Thr Asp Asn Thr Ser Glu His
      20           25           30
Ser Asp Leu Ala Thr Asp Gly Gln Thr Asn Gly Pro Ala Asp Ser Gly
      35           40           45
Thr Gly Thr His Ser Glu Gln Gly Asn Ser Asp Ile Ser Ser Pro Val
      50           55           60
Ser Ser Ser Asp Ala Ala Asn Thr Thr Asp Ser Thr Ala Gly Asn Thr
65           70           75           80
Gly Glu Gly Thr Ala Ala Asn Met Pro Gly Asp Met Ala His Ser Ser
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<210> 893

<211> 510

<212> DNA

<213> Homo sapiens

<400> 893

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<212> PRT

<213> Homo sapiens

<400> 894

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Glu Asp Lys Ser Ser Ile Arg Glu Ala Ile Ser Lys Ala Lys Ser Thr

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Tyr	Pro	Ser	Leu	Gln	Gln	Lys	Thr	Asn	Ala	Val	Lys	Lys	Leu	His	Lys	
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Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Lys	Tyr	Asn	Ser	Arg	Leu	Val	Gln	
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Gly	Gly	Thr	Phe	Arg	Ser	Ser	Ser	Ser	Leu	Arg	Val	His	Lys	Arg	Ile	
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 65 70 75 80  
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Gln Arg Asp Thr Tyr Tyr Lys Arg Leu Glu Phe Glu Cys Gly Thr Ile  
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Thr Lys Met Gly Phe Pro Gly Tyr Phe Leu Ile Val Ala Asp Phe Ile  
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<213> Homo sapiens

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<211> 734

<212> PRT

<213> Homo sapiens

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275	280	285
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Asp Asp Asp Gln Pro Val	Glu Gly Val Ile Thr	Asn Gly Ser Lys Val
565	570	575
Glu Val Glu Val Asp Ile	His Cys Cys Arg Gly	Arg Asp Leu Glu Asn
580	585	590
Ser Pro Pro Leu Ile Glu	Ser Ser Pro Thr Leu	Cys Ser Glu Glu His
595	600	605
Ala Arg Gly Ser Cys Phe	Gly Ile Arg Arg Gln	Asn Ser Val Asn Ser
610	615	620
Gly Met Leu Leu Pro Met	Ser Lys Asp Arg Met	Glu Leu Gln Lys Ser

```

625          630          635          640
Pro Ser Thr Ser Cys Leu Tyr Gly Lys Lys Leu Ser Asn Gly Ser Ile
          645          650          655
Val Pro Leu Glu Asp Ser Leu Asn Leu Ile Glu Val Ala Thr Glu Val
          660          665          670
Pro Lys Arg Lys Thr Gly Tyr Phe Ala Ala Pro Thr Gln Met Glu Pro
          675          680          685
Glu Asp Gln Phe Val Val Pro His Asp Leu Glu Glu Glu Val Lys Glu
          690          695          700
Gln Met Lys Gln His Gln Asp Ser Arg Leu Glu Pro Glu Pro His Glu
705          710          715          720
Glu Asp Arg Thr Glu Pro Pro Glu Glu Phe Asp Thr Ala Leu
          725          730

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<210> 901  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

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<400> 901
tcatgatcca cctgcctcgg cctcccaaag tgctgggatt acatacagat ggcaaacttc
60
atttcctttt tctcttaatg caacaagggtc atoccaaagat caggcttctc tcagtttctg
120
tggttaagtag tgatggacac ttatggagtt ttcagagact tatgcattgg gtaacaaggc
180
actgcaagag accccagata gcacagcatc atctcacatt tacaccacat cacatcaaca
240
tcgatgctag gaggtctaaa gctgatgccca ccttcagagc tgcaagtatc caaaagactc
300
cactcatga
309

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<210> 902  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

```

<400> 902
Met Ile His Leu Pro Arg Pro Pro Lys Val Leu Gly Leu His Thr Asp
1          5          10          15
Gly Lys Leu His Phe Leu Phe Leu Leu Met Gln Gln Gly His Pro Lys
          20          25          30
Ile Arg Leu Pro Ser Val Ser Val Val Ser Ser Asp Gly His Leu Trp
          35          40          45
Ser Phe Gln Arg Leu Met His Trp Val Thr Arg His Cys Lys Arg Pro
          50          55          60
Gln Ile Ala Gln His His Leu Thr Phe Thr Pro His His Ile Asn Ile
65          70          75          80
Asp Ala Arg Arg Ser Lys Ala Asp Ala Thr Phe Arg Ala Ala Ser Ile
          85          90          95
Gln Lys Thr Pro Leu Met
          100

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<210> 903  
 <211> 349  
 <212> DNA  
 <213> Homo sapiens

<400> 903  
 agatcttagt gaaaactgga agcaggaaga ataagttagt catggaagcc actttggctc  
 60  
 taagggtctt gatggcctca tgggttgaca ggaacagaag acaaagacta gggcccaccc  
 120  
 aagggtgtgaa gtctaataagg aaaccttttc tccataaggc tacaatgggt ctaccaaaaa  
 180  
 taaaaccatg ccaccccagg gactgcagcc caattttata tcaccatgag gtccaaaaaa  
 240  
 ttccaagctg tgaatttagt ttcaaatggc cttgggtctcc agtatcccta gccatgtggc  
 300  
 aaaaacaaac aattctcttt ggaggatata tctttatctt aagacttgn  
 349

<210> 904  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 904  
 Met Glu Ala Thr Leu Ala Leu Arg Ala Leu Met Ala Ser Trp Val Asp  
 1 5 10 15  
 Arg Asn Arg Arg Gln Arg Leu Gly Pro Thr Gln Gly Val Lys Ser Asn  
 20 25 30  
 Arg Lys Pro Phe Leu His Lys Ala Thr Met Gly Leu Pro Lys Ile Lys  
 35 40 45  
 Pro Cys His Pro Arg Asp Cys Ser Pro Ile Leu Tyr His His Glu Val  
 50 55 60  
 Gln Lys Ile Pro Ser Cys Glu Phe Ser Phe Lys Trp Pro Trp Ser Pro  
 65 70 75 80  
 Val Ser Leu Ala Met Trp Gln Lys Gln Thr Ile Leu Phe Gly Gly Tyr  
 85 90 95  
 Ile Phe Ile Leu Arg Leu  
 100

<210> 905  
 <211> 377  
 <212> DNA  
 <213> Homo sapiens

<400> 905  
 nntccggaac cgggtggtgtg gaccgagcac gattctcacc tagctcacc ggatcagcgt  
 60  
 ctcaacgaag acatcattat cgcggtgac cgggcagacg cggtgattag cgtatcccag  
 120  
 gggctctgcg acaggctggc tggacatggc gtgacctcaa cggtggttcc caacatcggt  
 180  
 gacgtcgagc tgtttgaccg tcttgatcga cgacatgagg ggacgatcgt cgtcagcgtc  
 240

gccaccctca acccgggaaa gggcatgatt gagttagctc aggctgttga gcgtcttccc  
 300  
 gaggttcagt tgagaatcat cggagatgga ccgcagcggc accaactgga ggccattgcc  
 360  
 gctgataatc cacgcgt  
 377

<210> 906  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 906  
 Xaa Pro Glu Pro Val Val Trp Thr Glu His Asp Ser His Leu Ala His  
 1 5 10 15  
 Pro Asp Gln Arg Leu Asn Glu Asp Ile Ile Ile Ala Gly Asp Arg Ala  
 20 25 30  
 Asp Ala Val Ile Ser Val Ser Gln Gly Leu Cys Asp Arg Leu Ala Gly  
 35 40 45  
 His Gly Val Thr Ser Thr Val Val Pro Asn Ile Val Asp Val Glu Leu  
 50 55 60  
 Phe Asp Arg Pro Asp Arg Arg His Glu Gly Thr Ile Val Val Ser Val  
 65 70 75 80  
 Ala Thr Leu Asn Pro Gly Lys Gly Met Ile Glu Leu Ala Gln Ala Val  
 85 90 95  
 Glu Arg Leu Pro Glu Val Gln Leu Arg Ile Ile Gly Asp Gly Pro Gln  
 100 105 110  
 Arg His Gln Leu Glu Ala Ile Ala Ala Asp Asn Pro Arg  
 115 120 125

<210> 907  
 <211> 332  
 <212> DNA  
 <213> Homo sapiens

<400> 907  
 acgcgtagga tgatgaagtc cgtcactgga tcgttcttgg gtggcaaccg ggaagtcggt  
 60  
 gaccagttct tcaacggcga ggttcaactg aaccttgtgc cgcaggggtac attcgccgag  
 120  
 cgcattcgtg ccggcgctgc tggatttgca gcattcttca cgctactgg ctatggtaca  
 180  
 gccgtgcaga aggggtgagct tgttcttaag tatgaaaaga aggacggtaa ggctgtgcca  
 240  
 gtcattgacgt ccaagccgcg tgaagtgcgc tcgtttgacg gccgtgacta tataatagaa  
 300  
 gaggttatta aggatgaata ggatatggtg aa  
 332

<210> 908  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 908

```

Thr Arg Arg Met Met Lys Ser Val Thr Gly Ser Phe Leu Gly Gly Asn
 1           5           10           15
Arg Glu Val Gly Asp Gln Phe Phe Asn Gly Glu Val Gln Leu Asn Leu
      20           25           30
Val Pro Gln Gly Thr Phe Ala Glu Arg Ile Arg Ala Gly Ala Ala Gly
      35           40           45
Ile Ala Ala Phe Phe Thr Pro Thr Gly Tyr Gly Thr Ala Val Gln Lys
      50           55           60
Gly Glu Leu Val Leu Lys Tyr Glu Lys Lys Asp Gly Lys Ala Val Pro
65           70           75           80
Val Met Thr Ser Lys Pro Arg Glu Val Arg Ser Phe Asp Gly Arg Asp
      85           90           95
Tyr Ile Ile Glu Glu Val Ile Lys Asp Glu
      100           105

```

&lt;210&gt; 909

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 909

```

acgcgtcggg catggcagct gtacagatct atcgcgtcag cagggcctac gcacacatga
60
tgccgcaggg gcaccgacgc tgtcgccatc aaaagagccg cctcgcgccc gcagcgcctc
120
ccagggacgg cgactcacgt ggctcgacac gcgcgcgcga gtcgcgtggg tgtgtcacgc
180
cccttttttt cccaccccaa caccgaaccg gcgggccatg gctgaggatt cgcaccccat
240
tcgctccggc ttgcgcatgc tcaagcgctc ctggagctcg aatgagaatg taccgccgcc
300
acaaagctcg ccgccggc
318

```

&lt;210&gt; 910

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 910

```

Met Ala Ala Val Gln Ile Tyr Arg Val Ser Arg Ala Tyr Ala His Met
 1           5           10           15
Met Pro Gln Gly His Arg Arg Cys Arg His Gln Lys Ser Arg Leu Ala
      20           25           30
Pro Ala Ala Pro Pro Arg Asp Gly Asp Ser Arg Gly Ser Thr Arg Ala
      35           40           45
Arg Glu Ser Arg Gly Cys Val Thr Pro Leu Phe Phe Pro Pro Gln His
      50           55           60
Arg Thr Gly Gly Pro Trp Leu Arg Ile Arg Thr Pro Phe Ala Pro Ala
65           70           75           80
Cys Ala Cys Ser Ser Ala Pro Gly Ala Arg Met Arg Met Tyr Arg Arg
      85           90           95
His Lys Ala Arg Arg Arg

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100

<210> 911  
 <211> 506  
 <212> DNA  
 <213> Homo sapiens

<400> 911  
 acgcgtgtgc agcactctcc acaagctggc cccaatcact ttgcatcaa attggtacag  
 60  
 caaccttatg aggctggcct tgggggaacc ctgttttagg gatgagctga acttaccggg  
 120  
 aggctgcatg cgaggttggt gtgaaatgca tatctggcct ttagctggt cggtcacct  
 180  
 ctggggttgg cacaggggag ggggttctgc catggctaga atgcgctaag ggggtgaaac  
 240  
 gaagcctgct gggcccgga accacagagc agcctggcct ttgaaggaga ccctgtggca  
 300  
 cccctgccc accccaagt ccagccattt cacttccttg gagatggtgc aaagcaagaa  
 360  
 aaaaaaaaa atccagtgtt ctgaggtcag cttccacca gccaggattc atcgtctgat  
 420  
 ctgtttgggg agagagcatg gagtggtgga gatgggttgg gcccagtggt tttctgatta  
 480  
 actcgagtt cacctgaaac attttg  
 506

<210> 912  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 912  
 Met Phe Gln Val Asn Cys Glu Leu Ile Arg Lys His Trp Gly Pro Thr  
 1 5 10 15  
 His Leu His His Ser Met Leu Ser Pro Gln Thr Asp Gln Thr Met Asn  
 20 25 30  
 Pro Gly Trp Trp Lys Ala Asp Leu Arg Thr Leu Asp Phe Phe Phe  
 35 40 45  
 Leu Ala Leu His His Leu Gln Gly Ser Glu Met Ala Gly Leu Gly Gly  
 50 55 60  
 Gly Gln Gly Val Pro Gln Gly Leu Leu Gln Arg Pro Gly Cys Ser Val  
 65 70 75 80  
 Val Pro Gly Pro Ser Arg Leu Arg Phe His Pro Leu Ala His Ser Ser  
 85 90 95  
 His Gly Arg Thr Pro Ala Pro Val Pro Thr Pro Glu Val Ser Arg Pro  
 100 105 110  
 Ala Thr Lys Pro Asp Met His Phe Thr Pro Thr Ser His Ala Ala Ser  
 115 120 125  
 Arg

<210> 913  
 <211> 339



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 913

cgcttcatgg cgtgggttcag gcgtacgggt ccggctactg gtgactaccg tggcacgaaa  
 60  
 tttttcgttc gcgagaacgg taaaaccttc gcaacctcga tgttcatggg ttgtgtcgcc  
 120  
 ctgggcgcca cggacctgct tttcgccctc gactcgattc cggcgtccta tggtttcacc  
 180  
 aacgaggggt acctatcct taccgctaac gtctttgctc tcatgggctt gcgtcagttg  
 240  
 tatttcctta ttggaagcct gttggaacgt ctggtgtact tgctgctggg actggtcgtg  
 300  
 attttgggct ttatcgccct caagctcatt ggccacgcg  
 339

&lt;210&gt; 914

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 914

Arg	Phe	Met	Ala	Trp	Phe	Arg	Arg	Thr	Val	Pro	Ala	Thr	Gly	Asp	Tyr
1				5					10					15	
Arg	Gly	Thr	Lys	Phe	Phe	Val	Arg	Glu	Asn	Gly	Lys	Thr	Leu	Ala	Thr
			20					25					30		
Ser	Met	Phe	Met	Val	Cys	Val	Ala	Leu	Gly	Ala	Thr	Asp	Leu	Leu	Phe
		35					40					45			
Ala	Leu	Asp	Ser	Ile	Pro	Ala	Ser	Tyr	Gly	Phe	Thr	Asn	Glu	Gly	Tyr
	50					55					60				
Leu	Ile	Leu	Thr	Ala	Asn	Val	Phe	Ala	Leu	Met	Gly	Leu	Arg	Gln	Leu
65					70				75					80	
Tyr	Phe	Leu	Ile	Gly	Ser	Leu	Leu	Glu	Arg	Leu	Val	Tyr	Leu	Ser	Leu
			85					90					95		
Gly	Leu	Val	Val	Ile	Leu	Gly	Phe	Ile	Ala	Leu	Lys	Leu	Ile	Gly	His
		100					105						110		

Ala

&lt;210&gt; 915

&lt;211&gt; 663

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 915

nnggtacctg tcaatcagta tgtaaacctc actttatgtc gtgggttatcc acttctgat  
 60  
 gacagtgaag atcctgttgt ggacattggt gctgctaccc ctgtcatcaa tggacagtca  
 120  
 ttaaccaagg gagagacttg catgaatcct caggatttta agccaggagc aatgggtctg  
 180  
 gagcagaatg gaaaatcggg acacactttg actggtgatg gtctcaatgg accatcagat  
 240

gcaagtgagc agagagtatc catggcatcg tcaggcagct cccagcctga actagtgact  
 300  
 atccctttga ttaagggccc taaagggttt gggtttgcaa ttgctgacag ccctactgga  
 360  
 cagaaggtga aaatgatact ggatagtcag tggtgtcaag gccttcagaa aggagatata  
 420  
 attaaggaaa tataccatca aaatgtgcag aatttaacac atctccaagt ggtagagggtg  
 480  
 ctaaagcagt ttccagtagg tgctgatgta ccattgctta tcttaagagg aggtccccct  
 540  
 tcaccaacca aaagtgccaa aatgaaaaca gataaaaagg aaaatgcagg aagtttggag  
 600  
 gccataaatg agcctattcc tcagcctatg ccttttccac cgagcattat caggtcagga  
 660  
 tcc  
 663

<210> 916

<211> 221

<212> PRT

<213> Homo sapiens

<400> 916

Xaa	Val	Pro	Val	Asn	Gln	Tyr	Val	Asn	Leu	Thr	Leu	Cys	Arg	Gly	Tyr
1				5					10					15	
Pro	Leu	Pro	Asp	Asp	Ser	Glu	Asp	Pro	Val	Val	Asp	Ile	Val	Ala	Ala
			20					25					30		
Thr	Pro	Val	Ile	Asn	Gly	Gln	Ser	Leu	Thr	Lys	Gly	Glu	Thr	Cys	Met
		35				40					45				
Asn	Pro	Gln	Asp	Phe	Lys	Pro	Gly	Ala	Met	Val	Leu	Glu	Gln	Asn	Gly
	50					55				60					
Lys	Ser	Gly	His	Thr	Leu	Thr	Gly	Asp	Gly	Leu	Asn	Gly	Pro	Ser	Asp
65				70					75					80	
Ala	Ser	Glu	Gln	Arg	Val	Ser	Met	Ala	Ser	Ser	Gly	Ser	Ser	Gln	Pro
			85					90						95	
Glu	Leu	Val	Thr	Ile	Pro	Leu	Ile	Lys	Gly	Pro	Lys	Gly	Phe	Gly	Phe
		100						105					110		
Ala	Ile	Ala	Asp	Ser	Pro	Thr	Gly	Gln	Lys	Val	Lys	Met	Ile	Leu	Asp
		115					120					125			
Ser	Gln	Trp	Cys	Gln	Gly	Leu	Gln	Lys	Gly	Asp	Ile	Ile	Lys	Glu	Ile
	130					135					140				
Tyr	His	Gln	Asn	Val	Gln	Asn	Leu	Thr	His	Leu	Gln	Val	Val	Glu	Val
145				150						155				160	
Leu	Lys	Gln	Phe	Pro	Val	Gly	Ala	Asp	Val	Pro	Leu	Leu	Ile	Leu	Arg
			165					170						175	
Gly	Gly	Pro	Pro	Ser	Pro	Thr	Lys	Ser	Ala	Lys	Met	Lys	Thr	Asp	Lys
		180					185					190			
Lys	Glu	Asn	Ala	Gly	Ser	Leu	Glu	Ala	Ile	Asn	Glu	Pro	Ile	Pro	Gln
	195					200						205			
Pro	Met	Pro	Phe	Pro	Pro	Ser	Ile	Ile	Arg	Ser	Gly	Ser			
	210					215					220				

<210> 917

<211> 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 917

atcgtggacc agaagttccc tgagtgtggc ttctacggcc ttacgacaa gatcctgctt  
 60  
 ttcaaacatg accccacgtc ggccaacctc ctgcagctgg tgcgctcgtc cggagacatc  
 120  
 caggagggcg acctggtgga ggtggtgctg tcggcctcgg ccaccttcga ggacttccag  
 180  
 atccgcccgc acgcccctcac ggtgcactcc tategggcgc ctgccttctg tgatcactgc  
 240  
 ggggagatgc tcttcggcct agtgcgccag ggcctcaagt gcgatggctg cgggctgaac  
 300  
 taccacaagc gctgtgcctt cagcatcccc aacaactgta gtggggcccg caaacggcgc  
 360  
 ctgtcatcca cgtctctggc cagtggccac tcggtgcgcc tcggcacctc cgagtccttg  
 420  
 cctgcacgg ctgaagagga gccgtagcac caccgaactc ctgcctcgcc gtccccgtca  
 480  
 tcctcttctt cctcttctgc ctcatcgat acggggccgcc ccattgagct ggacaagatg  
 540  
 ctgctctcca aggtcaaggt gccgcacacc ttctcatcc acagctatac acggcccacc  
 600  
 gtttgccagg cttgc  
 615

&lt;210&gt; 918

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 918

Ile Val Asp Gln Lys Phe Pro Glu Cys Gly Phe Tyr Gly Leu Tyr Asp  
 1 5 10 15  
 Lys Ile Leu Leu Phe Lys His Asp Pro Thr Ser Ala Asn Leu Leu Gln  
 20 25 30  
 Leu Val Arg Ser Ser Gly Asp Ile Gln Glu Gly Asp Leu Val Glu Val  
 35 40 45  
 Val Leu Ser Ala Ser Ala Thr Phe Glu Asp Phe Gln Ile Arg Pro His  
 50 55 60  
 Ala Leu Thr Val His Ser Tyr Arg Ala Pro Ala Phe Cys Asp His Cys  
 65 70 75 80  
 Gly Glu Met Leu Phe Gly Leu Val Arg Gln Gly Leu Lys Cys Asp Gly  
 85 90 95  
 Cys Gly Leu Asn Tyr His Lys Arg Cys Ala Phe Ser Ile Pro Asn Asn  
 100 105 110  
 Cys Ser Gly Ala Arg Lys Arg Arg Leu Ser Ser Thr Ser Leu Ala Ser  
 115 120 125  
 Gly His Ser Val Arg Leu Gly Thr Ser Glu Ser Leu Pro Cys Thr Ala  
 130 135 140  
 Glu Glu Glu Pro  
 145

<210> 919  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 919  
 accggtatgc gtccgctggc tgtgctcggc gacaacatca ccaccgacca tctatcgccg  
 60  
 acaaatgcga tcctgctcga tagcgcagcg ggtgagtacc tcgccaagat gggcccgcgcg  
 120  
 gaagaagact tcatttcgaa cgcgacccat cgtggcgatc acctgaccgc acagcgcgcc  
 180  
 accttcgcca acccgacctt gctcaacgag atggccgtag tcgatgggtga agtgaagaaa  
 240  
 ggctcgcttg cccgcgtgga accggaaggc catgtgatgc gcatgtggga agcc  
 294

<210> 920  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 920  
 Thr Gly Met Arg Pro Leu Ala Val Leu Gly Asp Asn Ile Thr Thr Asp  
 1 5 10 15  
 His Leu Ser Pro Thr Asn Ala Ile Leu Leu Asp Ser Ala Ala Gly Glu  
 20 25 30  
 Tyr Leu Ala Lys Met Gly Pro Pro Glu Glu Asp Phe Ile Ser Asn Ala  
 35 40 45  
 Thr His Arg Gly Asp His Leu Thr Ala Gln Arg Ala Thr Phe Ala Asn  
 50 55 60  
 Pro Thr Leu Leu Asn Glu Met Ala Val Val Asp Gly Glu Val Lys Lys  
 65 70 75 80  
 Gly Ser Leu Ala Arg Val Glu Pro Glu Gly His Val Met Arg Met Trp  
 85 90 95  
 Glu Ala

<210> 921  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 921  
 acgcgtttgc gcatcgcttt gaccggctctg acgatggctg agtacttccg cgatgttcag  
 60  
 aaccaggacg tgctgttggt catcgacaac atcttcgggt tctcccaggc tggttctgag  
 120  
 gtttcaaccc tgctaggtcg tatgccctcg gcgggtgggt accagcccaa cttggccgac  
 180  
 gagatgggccc aattgcagga gcgaatcacc tcgaccctg gtcactccat cacctcgatg  
 240  
 caggccgtct acgtccccgc tgacgattac accgaccggt ctccggcgac gaccttcgcc  
 300

cacctggatg ccaccacgga gctttctcgt gagattgcct ctcgtggcct gtacccggcc  
 360  
 gtggatccgc tggcgtcg  
 378

<210> 922  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 922  
 Thr Arg Leu Arg Ile Ala Leu Thr Gly Leu Thr Met Ala Glu Tyr Phe  
 1 5 10 15  
 Arg Asp Val Gln Asn Gln Asp Val Leu Leu Phe Ile Asp Asn Ile Phe  
 20 25 30  
 Arg Phe Ser Gln Ala Gly Ser Glu Val Ser Thr Leu Leu Gly Arg Met  
 35 40 45  
 Pro Ser Ala Val Gly Tyr Gln Pro Asn Leu Ala Asp Glu Met Gly Gln  
 50 55 60  
 Leu Gln Glu Arg Ile Thr Ser Thr Arg Gly His Ser Ile Thr Ser Met  
 65 70 75 80  
 Gln Ala Val Tyr Val Pro Ala Asp Asp Tyr Thr Asp Pro Ala Pro Ala  
 85 90 95  
 Thr Thr Phe Ala His Leu Asp Ala Thr Thr Glu Leu Ser Arg Glu Ile  
 100 105 110  
 Ala Ser Arg Gly Leu Tyr Pro Ala Val Asp Pro Leu Ala Ser  
 115 120 125

<210> 923  
 <211> 571  
 <212> DNA  
 <213> Homo sapiens

<400> 923  
 accggtatcg aactgccgca agacacgggc aagcatgtcg ccgacgaaca actgcaacgc  
 60  
 ctggacaccg cgctggagca cgtgcgcgga gaaatccgca ttaccctgga gcatgcacgc  
 120  
 caacgcaaga atgtcgaaga agaagacatc ttcgccgccc accttgcgct attggaagac  
 180  
 cccacgctgc tggacgccgc cactggtgcc atcgaacacg gcagcgccgc caccacgcc  
 240  
 tggcgcgatg caatccaggc gcaatgcgcc gtgttgctgg ccctgggcaa accgctgttt  
 300  
 gccgagcgcg ccaacgacct gcgcgatctg caacagcgag tactgcgtgc gctgttgggg  
 360  
 gaagcctggc acttcgaatt gccggccggg ccgattttca ggnnggcat taacttacc  
 420  
 ccttccgct tgttgcaact gagtgcccaa aacgccgtgg gtatttgcac ggccgaaggc  
 480  
 ggcgctacgt ctcacgtcgc gattttggcc cgaggcaaag gcttgccgtg cgtggtcgcg  
 540  
 ctgggcgccg aagtgtcga cgtgccccaa g  
 571

<210> 924  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

<400> 924  
 Thr Gly Ile Glu Leu Pro Gln Asp Thr Gly Lys His Val Ala Asp Glu  
 1 5 10 15  
 Gln Leu Gln Arg Leu Asp Thr Ala Leu Glu His Val Arg Gly Glu Ile  
 20 25 30  
 Arg Ile Thr Leu Glu His Ala Arg Gln Arg Lys Asn Val Glu Glu Glu  
 35 40 45  
 Asp Ile Phe Ala Ala His Leu Ala Leu Leu Glu Asp Pro Thr Leu Leu  
 50 55 60  
 Asp Ala Ala Thr Gly Ala Ile Glu His Gly Ser Ala Ala Thr His Ala  
 65 70 75 80  
 Trp Arg Asp Ala Ile Gln Ala Gln Cys Ala Val Leu Leu Ala Leu Gly  
 85 90 95  
 Lys Pro Leu Phe Ala Glu Arg Ala Asn Asp Leu Arg Asp Leu Gln Gln  
 100 105 110  
 Arg Val Leu Arg Ala Leu Leu Gly Glu Ala Trp His Phe Glu Leu Pro  
 115 120 125  
 Ala Gly Pro Ile Phe Arg Xaa Ala Ile Asn Leu Pro Pro Ser Ala Leu  
 130 135 140  
 Leu Gln Leu Ser Ala Gln Asn Ala Val Gly Ile Cys Met Ala Glu Gly  
 145 150 155 160  
 Gly Ala Thr Ser His Val Ala Ile Leu Ala Arg Gly Lys Gly Leu Pro  
 165 170 175  
 Cys Val Val Ala Leu Gly Ala Glu Val Leu Asp Val Pro Gln  
 180 185 190

<210> 925  
 <211> 620  
 <212> DNA  
 <213> Homo sapiens

<400> 925  
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 120  
 gtggtgtgta tgcattggtg gtgcacgtgt gcactgtgtg tgtgtgtatg catgtgtgtg  
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 cacgtgtgcc tgtgtgtatg catggtaatg tgcgtgtgca ctgtgtggtg tgtatgcatg  
 240  
 tgtgtgcacg tgtgcactgt gtatgcatag tgtgtgcacg tgtgcactgt gtgtggatgc  
 300  
 atggtaatgt gcacgtgtgc actgtgtgtg gtgtgtatga tgggtgtgtgc acgtgtgcac  
 360  
 ggtgtgtggt gtgtatgcat gtgtgtgcac gtgtgcactg tgtggcaggg gtgtttggtg  
 420  
 tgtgtgcatg tatgcatggt gtgtgcatac gtgtgcagca gcacctgggt ccattctccag  
 480

tgcccagcag catcacacgc acttttggtgc ttataaatg catggtcagt gaggtgccca  
 540  
 gcaccaagct gtccctttac cataacacct ggaatagtc cctgtgataa gctatcacat  
 600  
 aggaaacatt tttaaaattt  
 620

<210> 926  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 926  
 Thr Arg Ala Leu Cys Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys  
 1 5 10 15  
 Val Val Cys Met Xaa Trp Cys Val His Val Cys Xaa Cys Val Cys Met  
 20 25 30  
 Val Met Cys Thr Cys Ala Leu Cys Val Val Cys Met His Gly Val Cys  
 35 40 45  
 Thr Cys Ala Leu Cys Val Cys Val Cys Met Cys Val His Val Cys Leu  
 50 55 60  
 Cys Val Cys Met Val Met Cys Val Cys Thr Val Trp Cys Val Cys Met  
 65 70 75 80  
 Cys Val His Val Cys Thr Val Tyr Ala  
 85

<210> 927  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 927  
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 60  
 aagaggcatt tggggctctg ttcagatcat tccaacagca aaccgggcat ggagacccca  
 120  
 tctcaggtct gtgcttctct gggggccacc cagccatcct gcccaccagc tcagaggcag  
 180  
 ggacaaagcc ctcccaagag gcagcaggca gcaagggtca gccagcgagc tggggacagg  
 240  
 caggtacaac ctggaaaccc caaaggaccc cagatggcaa tgtgacacgg cccatccacc  
 300  
 aagcacctgt aatgccggct tcccacagag gcgagccaga tcctggcact attctttaag  
 360

<210> 928  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 928  
 Met Glu Leu Leu Glu Ile Val Arg His Asp Gln Arg Glu Glu Ala Phe  
 1 5 10 15  
 Gly Val Leu Phe Arg Ser Phe Gln Gln Gln Thr Gly His Gly Asp Pro

	20		25		30										
Ile	Ser	Gly	Leu	Cys	Phe	Ser	Gly	Gly	His	Pro	Ala	Ile	Leu	Pro	Thr
	35		40		45										
Ser	Ser	Glu	Ala	Gly	Thr	Lys	Pro	Ser	Gln	Glu	Ala	Ala	Gly	Ser	Lys
	50		55		60										
Gly	Gln	Pro	Ala	Gln	Trp	Gly	Gln	Ala	Gly	Thr	Thr	Trp	Lys	Pro	Gln
65			70		75									80	
Arg	Thr	Pro	Asp	Gly	Asn	Val	Thr	Arg	Pro	Ile	His	Gln	Ala	Pro	Val
			85		90									95	
Met	Pro	Ala	Ser	His	Arg	Gly	Glu	Pro	Asp	Pro	Gly	Thr	Ile	Leu	
			100		105									110	

&lt;210&gt; 929

&lt;211&gt; 2340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 929

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nnctccccag ggccgagtct tccggagtca gcagagagcc tggatggatc acaggaggat
60
aagcctcggg gctcatgtgc ggagcccact ttactgata cgggaatggg ggctcacata
120
aacaacagcc ggctcaaggc caagggcgtg ggccagcacg acaacgcca gaactttggg
180
aaccagagct ttgaggagct gcgagcagcc tgtctaagaa agggggagct cttcgaggac
240
cccttattcc ctgctgaacc cagctcactg ggcttcaagg acctgggccc caactccaaa
300
aatgtgcaga acatctcctg gcagcggccc aaggatatca taaacaaccc tctattcatc
360
atggatggga tttctccaac agacatctgc caggggatcc tcggggactg ctggctgctg
420
gctgccatcg gctcccttac cacctgcccc aaactgctat accgcgtggg gccagagga
480
cagagcttca agaaaaacta tgctggcatc ttccattttc agatttggca gtttggacag
540
tggttgaacg tggtggtaga tgaccggctg ccacaaaaga atgacaagct ggtgtttgtg
600
cactcaaccg aacgcagtga gttctggagt gccctgctgg agaaggcgta tgccaagctg
660
agtgggtcct atgaagcatt gtcagggggc agtaccatgg agggccttga ggacttcaca
720
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780
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840
gaactggaat ccatgactga caagatgctg gtgagagggc acgcttactc tgtgactggc
900
cttcaggatg tccactacag aggcaaaatg gaaacactga ttcgggtccg gaatccctgg
960
ggccggattg agtggaatgg agcttggagt gacagtgccg gggagtggga agaggtggcc
1020
tcagacatcc agatgcagct gctgcacaag acggaggacg gggagtcttg gatgtcctac
1080

```



caagattttcc tgaacaactt cacgctcctg gagatctgca acctcacgcc tgatacactc  
 1140  
 tctggggact acaagagcta ctggcacacc accttctacg agggcagctg gcgcagagggc  
 1200  
 agtcccgcag ggggctgcag gaaccaccct ggcacgttct ggaccaaccc ccagtttaag  
 1260  
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 1320  
 acctgcctgg tggccctaata gcagaagaac tggcggcatg cacggcagca gggagcccag  
 1380  
 ctgcagacca ttggctttgt cctctacgcg gtcccaaaag agtttcagaa cattcaggat  
 1440  
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 1560  
 ccctccacct ttgagccaca cagagatgct gacttctctc ttcgggtctt caccgagaag  
 1620  
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 1680  
 gtctctgagg atgacatgga ccaggacttc ctacatttgt ttaagatagt ggcaggagag  
 1740  
 ggcaaggaga taggggtgta tgagctccag aggctgctca acaggatggc catcaaattc  
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 1860  
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 1920  
 aagaaatgga tggacatctt cagagagtgt gaccaggacc attcaggcac cttgaactcc  
 1980  
 tatgagatgc gcctggttat tgagaaagca ggcataaagc tgaacaacaa ggtaatgcag  
 2040  
 gtcctggtgg ccaggatatgc agatgatggc ctgatcatag actttgacag cttcatcagc  
 2100  
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 2160  
 ggccatattt gcttgagcct ggaacagtgg ctgcagatga ccatgtgggg atagaggcgc  
 2220  
 tgtaggagcc tggatcatctc taccagcagc agcagcagcg aggttctagc ccaggagggc  
 2280  
 ggggtgcttc ttgtagccct cagctctcca gtctctgctg atgaaatggg atccaggtgg  
 2340

<210> 930  
 <211> 702  
 <212> PRT  
 <213> Homo sapiens

<400> 930  
 Met Val Ala His Ile Asn Asn Ser Arg Leu Lys Ala Lys Gly Val Gly  
 1 5 10 15  
 Gln His Asp Asn Ala Gln Asn Phe Gly Asn Gln Ser Phe Glu Leu  
 20 25 30  
 Arg Ala Ala Cys Leu Arg Lys Gly Glu Leu Phe Glu Asp Pro Leu Phe

35	40	45			
Pro	Ala	Glu	Pro	Ser	Ser
50	55	60	Leu	Gly	Phe
Lys	Asn	Val	Gln	Asn	Ile
65	70	75	Ser	Trp	Gln
Asn	Pro	Leu	Phe	Ile	Met
85	90	95	Asp	Gly	Ile
Gly	Ile	Leu	Gly	Asp	Cys
100	105	110	Trp	Leu	Leu
Thr	Cys	Pro	Lys	Leu	Leu
115	120	125	Tyr	Arg	Val
Lys	Lys	Asn	Tyr	Ala	Gly
130	135	140	Ile	Phe	His
Gln	Trp	Val	Asn	Val	Val
145	150	155	Val	Asp	Asp
Lys	Leu	Val	Phe	Val	His
165	170	175	Ser	Thr	Glu
Leu	Leu	Glu	Lys	Ala	Tyr
180	185	190	Ala	Lys	Leu
Ser	Gly	Gly	Ser	Thr	Met
195	200	205	Glu	Gly	Leu
Ala	Gln	Ser	Phe	Gln	Leu
210	215	220	Gln	Arg	Pro
Leu	Arg	Lys	Ala	Val	Glu
225	230	235	Arg	Ser	Ser
Val	Thr	Ser	Asp	Ser	Glu
245	250	255	Leu	Glu	Ser
Arg	Gly	His	Ala	Tyr	Ser
260	265	270	Val	Thr	Gly
Gly	Lys	Met	Glu	Thr	Leu
275	280	285	Ile	Arg	Val
Glu	Trp	Asn	Gly	Ala	Trp
290	295	300	Ser	Asp	Ser
Ala	Ser	Asp	Ile	Gln	Met
305	310	315	Gln	Leu	Leu
Phe	Trp	Met	Ser	Tyr	Gln
325	330	335	Asp	Phe	Leu
Ile	Cys	Asn	Leu	Thr	Pro
340	345	350	Asp	Thr	Leu
Trp	His	Thr	Thr	Phe	Tyr
355	360	365	Glu	Gly	Ser
Gly	Gly	Cys	Arg	Asn	His
370	375	380	Pro	Gly	Thr
Lys	Ile	Ser	Leu	Pro	Glu
385	390	395	Gly	Asp	Asp
Asn	Val	Val	Val	Cys	Thr
405	410	415	Cys	Leu	Val
Arg	His	Ala	Arg	Gln	Gln
420	425	430	Gly	Ala	Gln
Leu	Tyr	Ala	Val	Pro	Lys
435	440	445	Glu	Phe	Gln
Lys	Lys	Glu	Phe	Phe	Thr
450	455	460	Lys	Tyr	Gln
Phe	Thr	Asn	Ser	Arg	Glu
			Val	Ser	Ser
			Gln	Leu	Arg
			Leu	Pro	Pro
			Gly		

465		470		475		480
Glu Tyr Ile Ile Ile	Pro Ser Thr Phe Glu	Pro His Arg Asp Ala Asp				
	485	490	495			
Phe Leu Leu Arg Val	Phe Thr Glu Lys His Ser Glu Ser Trp Glu Leu					
	500	505	510			
Asp Glu Val Asn Tyr Ala	Glu Gln Leu Gln Glu Glu Lys Val Ser Glu					
	515	520	525			
Asp Asp Met Asp Gln Asp	Phe Leu His Leu Phe Lys Ile Val Ala Gly					
	530	535	540			
Glu Gly Lys Glu Ile Gly	Val Tyr Glu Leu Gln Arg Leu Leu Asn Arg					
545	550	555	560			
Met Ala Ile Lys Phe	Lys Ser Phe Lys Thr Lys Gly Phe Gly Leu Asp					
	565	570	575			
Ala Cys Arg Cys Met	Ile Asn Leu Met Asp Lys Asp Gly Ser Gly Lys					
	580	585	590			
Leu Gly Leu Leu Glu	Phe Lys Ile Leu Trp Lys Lys Leu Lys Lys Trp					
	595	600	605			
Met Asp Ile Phe Arg	Glu Cys Asp Gln Asp His Ser Gly Thr Leu Asn					
	610	615	620			
Ser Tyr Glu Met Arg	Leu Val Ile Glu Lys Ala Gly Ile Lys Leu Asn					
625	630	635	640			
Asn Lys Val Met Gln	Val Leu Val Ala Arg Tyr Ala Asp Asp Gly Leu					
	645	650	655			
Ile Ile Asp Phe Asp	Ser Phe Ile Ser Cys Phe Leu Arg Leu Lys Thr					
	660	665	670			
Met Phe Thr Phe Phe	Leu Thr Met Asp Pro Lys Asn Thr Gly His Ile					
	675	680	685			
Cys Leu Ser Leu Glu	Gln Trp Leu Gln Met Thr Met Trp Gly					
	690	695	700			

<210> 931  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 931  
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 60  
 acgaccgatc acaagacccg ctggtacgcc gagaagcagt acgccgagct cgtgggtgag  
 120  
 gatgtcaaga tccgagagtg gctccacaag aatctggagc gcgccggtct ttcgtccatc  
 180  
 gagatcgagc gtcgctccga gcgcgtgacc attttccttt acgccgctcg cccgggcatc  
 240  
 gttatcgggc gcaatggccg ggaggccgag cgcgtgcgtn ntgagctcga aaagctt  
 297

<210> 932  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 932  
 Met Gly Gln Lys Ile Asn Pro His Gly Phe Arg Leu Gly Val Thr Thr

```

1           5           10           15
Asp His Lys Thr Arg Trp Tyr Ala Glu Lys Gln Tyr Ala Glu Leu Val
                20           25           30
Gly Glu Asp Val Lys Ile Arg Glu Trp Leu His Lys Asn Leu Glu Arg
                35           40           45
Ala Gly Leu Ser Ser Ile Glu Ile Glu Arg Arg Ser Glu Arg Val Thr
                50           55           60
Ile Phe Leu Tyr Ala Ala Arg Pro Gly Ile Val Ile Gly Arg Asn Gly
65           70           75           80
Arg Glu Ala Glu Arg Val Arg Xaa Glu Leu Glu Lys Leu
                85           90

```

&lt;210&gt; 933

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 933

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nnacgcgctcg ccaagctggt gatggccgaa tacaaggggc tcaacgtcat cgtcaaaacc
60
tccgccgatc cggcaagcca agccaatgcc gtgcaggatc tggcgggggc aggcacgcac
120
gcgctggcca tctcgccgac cgacccggat cagctggttt cggcgatcca gcaggtcaag
180
gacgacggca agttcgtggc gctggtcgac cgtgcgcctt ccgtcaacga caacacgac
240
cgcgatctct acgtggccgg caacaacccg gcgctcggcg aagtggcggg caaattcatg
300
ggcga
305

```

&lt;210&gt; 934

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 934

```

Xaa Arg Val Ala Lys Leu Leu Met Ala Glu Tyr Lys Gly Leu Asn Val
1           5           10           15
Ile Val Lys Thr Ser Ala Asp Pro Ala Ser Gln Ala Asn Ala Val Gln
                20           25           30
Asp Leu Ala Gly Ala Gly Ile Asp Ala Leu Ala Ile Leu Pro Thr Asp
                35           40           45
Pro Asp Gln Leu Val Ser Ala Ile Gln Gln Val Lys Asp Asp Gly Lys
                50           55           60
Phe Val Ala Leu Val Asp Arg Ala Pro Ser Val Asn Asp Asn Thr Ile
65           70           75           80
Arg Asp Leu Tyr Val Ala Gly Asn Asn Pro Ala Leu Gly Glu Val Ala
                85           90           95
Gly Lys Phe Met Gly
                100

```

&lt;210&gt; 935

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 935

acgcgtgaag ggctgatgag tgctatgaaa aagccagggg cccgaggaca ctgggggtgga  
 60  
 caggctcccc tggggaagtc ctcttagaac tgagggatca acactggagg agactgcaag  
 120  
 ggggtacggga taaatgttcc tgggtgaagga aacagcaggg gcaaaggccc tgcagcagaa  
 180  
 aggagcggagg ccctttggag taacagaaaag accatgggtga caggagctca gaaagaccac  
 240  
 tgggtgttaag actataagcc agtggaggcc agattgggga atgggatggg aggggtgctt  
 300  
 gaagaccatg gtgaggctct cttggtcttt act  
 333

&lt;210&gt; 936

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 936

Met	Val	Phe	Lys	His	Pro	Ser	His	Pro	Ile	Pro	Gln	Ser	Gly	Leu	His
1				5					10					15	
Trp	Leu	Ile	Val	Leu	Thr	Pro	Val	Val	Phe	Leu	Ser	Ser	Cys	His	His
			20					25					30		
Gly	Leu	Ser	Val	Thr	Pro	Lys	Gly	Leu	Ala	Pro	Phe	Cys	Cys	Arg	Ala
			35				40					45			
Phe	Ala	Pro	Ala	Val	Ser	Phe	Thr	Arg	Asn	Ile	Tyr	Pro	Val	Pro	Leu
			50				55				60				
Ala	Val	Ser	Ser	Ser	Val	Asp	Pro	Ser	Val	Leu	Arg	Gly	Leu	Pro	Gln
					70					75					80
Gly	Ser	Leu	Ser	Thr	Pro	Val	Ser	Ser	Gly	Pro	Trp	Leu	Phe	His	Ser
				85					90					95	
Thr	His	Gln	Pro	Phe	Thr	Arg									
															100

&lt;210&gt; 937

&lt;211&gt; 464

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 937

nnnttatctg cggagggggg ggccaccctg cccacactca tgctgcaggc ctccaccgac  
 60  
 ccggcggacg acgagctcaa ggatctgttg acggccgacc tcatggacca gcacaacctc  
 120  
 gaccgtgccc tggcaggggt gcgtgccagt caggtcatcg acgaagctcg cgccgaggtg  
 180  
 cagcggcgtg ccgatctcgc ccgtggccat ctgcgccatcc ttcccgcagg cgatgcccg  
 240  
 acggcgttgg agaccctgtg cgacgaggtg ggttcccggg cggcctgaac cccgaccctg  
 300

ccagnctgcg tcccatctcc tggccgggac cgctccagcg tctgctctct gacagctcat  
 360  
 cgttcttccg acaccaagga gtttctcgtg gcccgtcacg tcgatctcat cggcattggg  
 420  
 cccggcaacc cggactggat caccctggct gccgtcaagg ccan  
 464

<210> 938  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 938  
 Xaa Leu Ser Ala Glu Gly Val Ala Thr Leu Pro Thr Leu Met Leu Gln  
 1 5 10 15  
 Ala Ser Thr Asp Pro Ala Asp Asp Glu Leu Lys Asp Leu Leu Thr Ala  
 20 25 30  
 Asp Leu Met Asp Gln His Asn Leu Asp Arg Ala Leu Ala Gly Leu Arg  
 35 40 45  
 Ala Ser His Val Ile Asp Glu Ala Arg Ala Glu Val Gln Arg Arg Ala  
 50 55 60  
 Asp Leu Ala Arg Gly His Leu Ala Ile Leu Pro Ala Gly Asp Ala Arg  
 65 70 75 80  
 Thr Ala Leu Glu Thr Leu Cys Asp Glu Val Gly Ser Arg Ala Ala  
 85 90 95

<210> 939  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

<400> 939  
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 60  
 ggactgctgc cggtcgaggt ggacttcgcc gccacgaaga cccttgccctt gtcgcacggg  
 120  
 acatggcggg ggatcgaggt tgggtggctat gaaatccatc acgggcgtct gtcgttcgct  
 180  
 gaggacgctg aagccttcct cgacggcgta cacgtcggtc cggtatgggg gacgatgtgg  
 240  
 cacggggcat tcgagcacga cgaattccgt cgcacgtggc tggctgacgc ggcccgtcac  
 300  
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 360  
 atgatcgaaa ccctcgccga cgcgt  
 385

<210> 940  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 940  
 Xaa Thr Ile Leu Asp Pro Asp Gly Gln Glu Thr Thr Pro Gly Ser Val

```

      1             5             10             15
Ile Glu Gly Leu Gly Leu Leu Pro Val Glu Val Asp Phe Ala Ala Thr
      20             25             30
Lys Thr Leu Ala Leu Ser His Gly Thr Trp Arg Gly Ile Glu Val Gly
      35             40             45
Gly Tyr Glu Ile His His Gly Arg Leu Ser Phe Ala Glu Asp Ala Glu
      50             55             60
Ala Phe Leu Asp Gly Val His Val Gly Pro Val Trp Gly Thr Met Trp
      65             70             75             80
His Gly Ala Phe Glu His Asp Glu Phe Arg Arg Thr Trp Leu Ala Asp
      85             90             95
Ala Ala Arg His Ala Gly Ser Ser Trp Arg Pro His Ser Asp Glu Leu
      100            105            110
Gly Tyr Gln Ala Arg Arg Glu Ala Met Ile Glu Thr Leu Ala Asp Ala
      115            120            125

```

&lt;210&gt; 941

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 941

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atcttctggt cggcgggtgat cacgctgggtg accatcggcc tgctgtttgc cggcaacttc
60
gaagccatgc aaaccatggt cgtgctggcc gggctgccgt tctcgggtggt gctgattttc
120
ttcatgttcg gtttgcacaa ggcatgctgc caggacgtgg ccatggagca ggagcaggca
180
caattggctg aacgtggctg ccgtgggtttc agcgagcgcc tgaccgcgct ggacctgcaa
240
ccgagccagg gcaccgtgca acgctttatg gacaaacatg tgacgccggc gttggaacaa
300
gcggcgactg cgttgctgta tcaagggctg gaagtgcaga ccctgctt
348

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&lt;210&gt; 942

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 942

```

Ile Phe Trp Ser Ala Val Ile Thr Leu Val Thr Ile Gly Leu Leu Phe
 1             5             10             15
Ala Gly Asn Phe Glu Ala Met Gln Thr Met Val Val Leu Ala Gly Leu
 20             25             30
Pro Phe Ser Val Val Leu Ile Phe Met Phe Gly Leu His Lys Ala
 35             40             45
Met Arg Gln Asp Val Ala Met Glu Gln Glu Gln Ala Gln Leu Ala Glu
 50             55             60
Arg Gly Arg Arg Gly Phe Ser Glu Arg Leu Thr Ala Leu Asp Leu Gln
 65             70             75             80
Pro Ser Gln Gly Thr Val Gln Arg Phe Met Asp Lys His Val Thr Pro
 85             90             95
Ala Leu Glu Gln Ala Ala Thr Ala Leu Arg Asp Gln Gly Leu Glu Val

```

100 105 110  
 Gln Thr Leu Leu  
 115

<210> 943  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

<400> 943  
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 ctctcttaat gcattcctggg ctcttgctaa ccttggtgga aacaccgtct cttctctcct  
 120  
 ttgacctctt ctgtgatcac atctcactt ctgagcctat ctgcccattc agtcaatccc  
 180  
 ccttggttct gggatgctat ttccctggcc gcctccctct aggagtgttt agaaccctca  
 240  
 ctgtgggcag aaggaggga agatggctga ggtacctgga aagggacgtg tggatccccg  
 300  
 ggcattggaag gaaggaggca ggagagctag aaaaagggat gagatctaatt gttccctaag  
 360  
 gaacctggct tagtgctggc cttcacata ctgagacatg gaatccttac tactgttctc  
 420  
 tgaggaaaga ggctgttcc  
 439

<210> 944  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<400> 944  
 Met Ala Gly Ala Glu Gln Ile Glu Gln Asp Leu Val Ser Phe Ser Leu  
 1 5 10 15  
 His Phe Val Pro Pro Leu Met His Pro Gly Leu Leu Leu Thr Leu Trp  
 20 25 30  
 Glu Thr Pro Ser Leu Leu Ser Phe Ala Leu Phe Cys Asp His Ile Leu  
 35 40 45  
 Thr Ser Glu Pro Ile Cys Pro Ser Ser Gln Ser Pro Leu Val Leu Gly  
 50 55 60  
 Cys Tyr Phe Pro Gly Arg Leu Pro Leu Gly Val Phe Arg Thr Leu Thr  
 65 70 75 80  
 Val Gly Arg Arg Glu Gly Arg Trp Leu Arg Tyr Leu Glu Arg Asp Val  
 85 90 95  
 Trp Ile Pro Gly His Gly Arg Lys Glu Ala Gly Glu Leu Glu Lys Gly  
 100 105 110  
 Met Arg Ser Asn Val Pro  
 115

<210> 945  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 945

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 60  
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 120  
 tatatatata gcgtgtacaa caaaacatgc actgtttact cagcaccctg tggttgtctc  
 180  
 agcaatagct tttctaaaga actgctacta tttgaaatgg agggggaggg gggtcctgga  
 240  
 cagagtattg tgcaagttga aagtctctgg atggggctat gtatatacta ccagccaatt  
 300  
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 339

&lt;210&gt; 946

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 946

Xaa	Ile	Arg	Glu	Ala	Phe	His	Ile	Phe	Phe	Leu	Leu	Ile	Ile	Ser	Ile
1				5				10						15	
Ala	Leu	Tyr	Val	Glu	Met	Val	Ile	Tyr	Ile	Tyr	Thr	His	Thr	His	Ile
			20					25					30		
Tyr	Val	Cys	Val	Cys	Ile	Tyr	Val	Tyr	Ile	Tyr	Ser	Val	Tyr	Asn	Lys
		35					40					45			
Thr	Cys	Thr	Val	Tyr	Ser	Ala	Pro	Arg	Val	Cys	Leu	Ser	Asn	Ser	Phe
	50					55				60					
Ser	Lys	Glu	Leu	Leu	Leu	Phe	Glu	Met	Glu	Gly	Glu	Gly	Gly	Pro	Gly
65					70					75				80	
Gln	Ser	Ile	Val	Gln	Val	Glu	Ser	Leu	Trp	Met	Gly	Leu	Cys	Ile	Ser
			85						90				95		
Tyr	Gln	Pro	Ile	Trp	Val	Gln	Ile	Gly	Phe	Glu	Gly	Leu	Pro	Leu	Ser
			100					105					110		

Thr

&lt;210&gt; 947

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 947

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 60  
 ctctggcat cacacctgtg cacgggggtg gggaaggagt ggacaggagt ggacaagtca  
 120  
 agtagtgctg ccggctcaag cgatgcctca gcctttctgc tgtgtgcaa gctttgcaga  
 180  
 ggagatgatg cttcaaagt gtccctgttg gggatgagca gccaggcctt tatacactgg  
 240  
 gacagtcagt catggatacg tggatactct ggaaaccctc atccctggag gtctgagccc  
 300

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 540  
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<210> 948

<211> 154

<212> PRT

<213> Homo sapiens

<400> 948

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Leu	Cys	Thr	Gly	Val	Gly	Lys	Glu	Trp	Thr	Gly	Val	Asp	Lys	Ser	Ser
			20					25					30		
Ser	Ala	Ala	Gly	Ser	Ser	Asp	Ala	Ser	Ala	Phe	Leu	Leu	Cys	Ala	Lys
			35				40					45			
Leu	Cys	Arg	Gly	Asp	Asp	Ala	Ser	Lys	Leu	Ser	Leu	Leu	Gly	Met	Ser
			50			55				60					
Ser	Gln	Ala	Phe	Ile	His	Trp	Asp	Ser	Gln	Ser	Trp	Ile	Arg	Gly	Tyr
65					70					75				80	
Ser	Gly	Asn	Pro	His	Pro	Trp	Arg	Ser	Glu	Pro	Leu	Asp	Thr	Met	Pro
				85					90					95	
Phe	Leu	Gly	Trp	Ser	Cys	Cys	Pro	Cys	Pro	Phe	Thr	Ile	Lys	Ile	Gly
			100					105					110		
Gln	Glu	Asn	Thr	Arg	Thr	His	Leu	Ser	Phe	Ser	Ser	Tyr	Ala	Lys	Pro
			115				120					125			
Val	Leu	Pro	Arg	Thr	Ser	Pro	Met	Cys	Thr	Ala	Leu	Leu	Phe	Ser	Ala
			130				135					140			
Asp	Gln	Val	Gln	Leu	Leu	Leu	Leu	Arg	Trp						
145							150								

<210> 949

<211> 661

<212> DNA

<213> Homo sapiens

<400> 949

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 180  
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ggacatagat gacaacatca ttcactttac agtgggggaa ggcataagaa tatgggggaa  
 300  
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 360  
 cagaaaagat ttaagttcaa ctctctggca tgcagcaatt gagataaata gagggaccaa  
 420  
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 480  
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 540  
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 660  
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 661

<210> 950

<211> 210

<212> PRT

<213> Homo sapiens

<400> 950

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His	Ser	Gly	Gln	Glu	Gly	Phe	Arg	Asp	Ser	Thr	Asp	Pro	Arg	Tyr	Ala
			20					25					30		
Val	Thr	Phe	Leu	Asn	Leu	Gly	Gln	Ile	Gln	Glu	His	Gly	Ser	Ser	Tyr
		35					40					45			
Ile	Arg	Gly	Cys	Ala	Phe	His	His	Gly	Phe	Ser	Pro	Ala	Ile	Gly	Val
	50					55					60				
Phe	Gly	Thr	Asp	Gly	Leu	Asp	Ile	Asp	Asp	Asn	Ile	Ile	His	Phe	Thr
65					70					75				80	
Val	Gly	Glu	Gly	Ile	Arg	Ile	Trp	Gly	Asn	Ala	Asn	Arg	Val	Arg	Gly
				85					90					95	
Asn	Leu	Ile	Ala	Leu	Ser	Val	Trp	Pro	Gly	Thr	Tyr	Gln	Asn	Arg	Lys
			100					105					110		
Asp	Leu	Ser	Ser	Thr	Leu	Trp	His	Ala	Ala	Ile	Glu	Ile	Asn	Arg	Gly
		115					120					125			
Thr	Asn	Thr	Val	Leu	Gln	Asn	Asn	Val	Val	Ala	Gly	Phe	Gly	Arg	Ala
	130					135					140				
Gly	Tyr	Arg	Ile	Asp	Gly	Glu	Pro	Cys	Pro	Gly	Gln	Phe	Asn	Pro	Val
145					150					155				160	
Glu	Lys	Trp	Phe	Asp	Asn	Glu	Ala	His	Gly	Gly	Leu	Tyr	Gly	Ile	Tyr
			165						170					175	
Met	Asn	Gln	Asp	Gly	Leu	Pro	Gly	Cys	Ser	Leu	Ile	Gln	Gly	Phe	Thr
		180						185				190			
Ile	Trp	Thr	Cys	Trp	Asp	Tyr	Gly	Ile	Tyr	Phe	Gln	Thr	Thr	Glu	Ser
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Val	His														
	210														

<210> 951

<211> 2615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 951

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120
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180
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240
tcggtgttgg cggggccggg ctacacgacg ttggctggcc tggatctcag ccacaacctg
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540
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960
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1020
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1080
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1320
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1380
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1440
caggtccact gggctgagtg tccccttggg cccatggccc agtcactcag gggcgagtct
1500

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 1860  
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 1980  
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 2400  
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 2520  
 aataaacact ataaaatgaa gactaaggaa acagcccagg gttcggaagc tgagatgcta  
 2580  
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<210> 952

<211> 357

<212> PRT

<213> Homo sapiens

<400> 952

Xaa	Pro	Ala	Pro	Thr	Met	Pro	Trp	Pro	Leu	Leu	Leu	Leu	Leu	Ala	Val
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			20					25					30		
Val	Glu	Thr	Phe	Gly	Leu	Phe	Asp	Ser	Phe	Ser	Leu	Thr	Arg	Val	Asp
			35				40					45			
Cys	Ser	Gly	Leu	Gly	Pro	His	Ile	Met	Pro	Val	Pro	Ile	Pro	Leu	Asp
			50			55					60				
Thr	Ala	His	Leu	Asp	Leu	Ser	Ser	Asn	Arg	Leu	Glu	Met	Val	Asn	Glu

65					70					75					80
Ser	Val	Leu	Ala	Gly	Pro	Gly	Tyr	Thr	Thr	Leu	Ala	Gly	Leu	Asp	Leu
				85					90					95	
Ser	His	Asn	Leu	Leu	Thr	Ser	Ile	Ser	Pro	Thr	Ala	Phe	Ser	Arg	Leu
			100					105					110		
Arg	Tyr	Leu	Glu	Ser	Leu	Asp	Leu	Ser	His	Asn	Gly	Leu	Thr	Ala	Leu
		115					120					125			
Pro	Ala	Glu	Ser	Phe	Thr	Ser	Ser	Pro	Leu	Ser	Asp	Val	Asn	Leu	Ser
	130					135					140				
His	Asn	Gln	Leu	Arg	Glu	Val	Ser	Val	Ser	Ala	Phe	Thr	Thr	His	Ser
145					150					155				160	
Gln	Gly	Arg	Ala	Leu	His	Val	Asp	Leu	Ser	His	Asn	Leu	Ser	Pro	Pro
			165					170						175	
Arg	Ala	Pro	Pro	His	Glu	Gly	Arg	Pro	Ala	Cys	Ala	His	His	Ser	Glu
		180						185					190		
Pro	Glu	Pro	Gly	Leu	Glu	Pro	Ala	Pro	Cys	Arg	Ala	Gln	Pro	Arg	Asp
	195					200						205			
Leu	Pro	Leu	Arg	Tyr	Leu	Ser	Leu	Asp	Gly	Asn	Pro	Leu	Ala	Val	Ile
	210					215					220				
Gly	Pro	Gly	Ala	Phe	Ala	Gly	Leu	Gly	Gly	Leu	Thr	His	Leu	Ser	Leu
225					230					235				240	
Ala	Ser	Leu	Gln	Arg	Leu	Pro	Glu	Leu	Ala	Pro	Ser	Gly	Phe	Arg	Glu
			245					250						255	
Leu	Pro	Gly	Leu	Gln	Val	Leu	Asp	Leu	Ser	Gly	Asn	Pro	Lys	Leu	Asn
		260						265					270		
Trp	Ala	Gly	Ala	Glu	Val	Phe	Ser	Gly	Leu	Ser	Ser	Leu	Gln	Glu	Leu
	275						280					285			
Asp	Leu	Ser	Gly	Thr	Asn	Leu	Val	Pro	Leu	Pro	Glu	Ala	Leu	Leu	Leu
	290					295					300				
His	Leu	Pro	Ala	Leu	Gln	Ser	Val	Ser	Val	Gly	Gln	Asp	Val	Arg	Cys
305					310					315				320	
Arg	Arg	Leu	Val	Arg	Glu	Gly	Thr	Tyr	Pro	Arg	Arg	Pro	Gly	Ser	Ser
			325					330					335		
Pro	Lys	Val	Ala	Leu	His	Cys	Val	Asp	Thr	Arg	Glu	Ser	Ala	Ala	Arg
		340						345					350		
Gly	Pro	Thr	Ile	Leu											
		355													

&lt;210&gt; 953

&lt;211&gt; 347

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 953

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120
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180
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240
ggtagtcat ggagggcagt gtccctctgc atcctgtctg gggttgtcaa atatggccaa
300

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347

<210> 954

<211> 103

<212> PRT

<213> Homo sapiens

<400> 954

Met	Glu	Pro	Thr	Trp	Pro	Tyr	Leu	Thr	Thr	Pro	Asp	Arg	Met	Gln	Arg
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Asp	Thr	Ala	Leu	His	Asp	Ser	Pro	Gln	Arg	Ala	His	Leu	Glu	Gly	Glu
		20					25					30			
Arg	Lys	Gly	His	Glu	Arg	Val	Lys	Arg	Asn	Gly	Phe	Ser	Leu	Pro	Ser
	35					40					45				
Tyr	Cys	Val	Ser	Ala	Ala	Val	Thr	Pro	Gln	Ser	Arg	Gln	Val	Gln	Gln
	50					55					60				
Ser	Arg	His	Gly	Lys	Thr	Ser	Thr	Pro	Asn	Asp	Gly	Ser	Arg	Asp	Gly
65				70						75				80	
Glu	Ser	Val	Val	His	Thr	Leu	Arg	Gly	Asp	Pro	Arg	Glu	Thr	Gly	Leu
				85				90						95	
Arg	Thr	Gly	Met	Ala	Ser	Arg									
				100											

<210> 955

<211> 634

<212> DNA

<213> Homo sapiens

<400> 955

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120  
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180  
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420  
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480  
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540  
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600  
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634

<210> 956

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 956

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Met Glu Ser Gly Glu Ser Asn Val Ser Met Glu Arg Val Pro Gly Cys
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Gly Arg Leu Gly Arg Ser Phe Leu Leu Ser Ala Asp Asn Arg Glu Glu
          20           25           30
His Ser Val Val Ala Ser Gln Val Cys Thr Asn Ala Ala Cys Glu Pro
          35           40           45
Val Thr Glu Ala Leu Thr Cys Arg Ala Ala His Leu Gln Ser Arg Ser
          50           55           60
Pro Ala Glu Pro Phe Thr Cys Arg Ala Leu His Leu Gln Asn Arg Ser
65           70           75           80
Pro Ala Glu Pro Phe Thr Cys Arg Thr Ile His Leu Gln Ser Arg Ser
          85           90           95
Pro Ala Glu Pro Phe Thr Cys Arg Ala Ala His Leu Gln Ser Pro Ser
          100          105          110
Arg

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&lt;210&gt; 957

&lt;211&gt; 823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 957

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180
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240
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420
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720
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780

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823

<210> 958

<211> 105

<212> PRT

<213> Homo sapiens

<400> 958

Met	Ala	Val	Gly	His	Val	Gly	Gln	Lys	Val	Thr	Trp	Ser	Gln	Ala	Pro
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Val	Ser	Gln	Val	Pro	Thr	Gly	Thr	Ser	Pro	Leu	Gln	Ala	Phe	Trp	Asp
		20						25					30		
Pro	His	Trp	Leu	Arg	Trp	Ala	Leu	His	Ser	Thr	Pro	Thr	Gly	Lys	Leu
		35					40					45			
Leu	Phe	Leu	Pro	Ser	Ser	Lys	Val	Pro	Lys	Leu	Pro	Gly	Cys	Ser	Val
	50					55				60					
Gly	Pro	Arg	Leu	Gln	His	Thr	Leu	Glu	Ala	Ala	Pro	His	Pro	Val	Ser
65					70					75				80	
Trp	Phe	Arg	Leu	Leu	Gln	Ala	Leu	Ser	Ser	Ala	Gly	His	Pro	Leu	Leu
			85					90						95	
Pro	Val	Ser	Arg	Pro	Leu	Gly	Thr	Ala							
			100					105							

<210> 959

<211> 586

<212> DNA

<213> Homo sapiens

<400> 959

ngtcatgact gcatggccaa gcatgactcc aacaccatca ttaagtttgc cgacgacaca  
60  
acagtggtag gcctgatcac cgacaacgat gaggcagcct atagggagga ggtcagagac  
120  
ctggcagtgt ggtgccagga taacaacctc tccctcaacg tgatcaagac cacgaagatg  
180  
atcgtggact acaggaaaag gagggctcag cagcggccca ttctcattga tggggctgta  
240  
tgaggagccag ttgagagctt caagttcctt ggtgtccaca tcaccatcga actatcatgg  
300  
tccaaacaca ccaagacagt agtgaagagg gtgcgacaat gcctattcca cctcggtaga  
360  
caaaaaagat ttggaatgga tcctcagacc ctcaaaaagt ttgacatcta caccatcgag  
420  
agcatcatga ctggttgcat caccgcctgg tatggcaact gctcggcctc cgaccgcaag  
480  
gcactacaga gggtagtgcg tacggcccag tacatcactg gggctaagct tcctgccatc  
540  
caggacctct ataccaggcg gtgtcagcgg aagaccctga caattg  
586

<210> 960

<211> 195

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 960

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Xaa His Asp Cys Met Ala Lys His Asp Ser Asn Thr Ile Ile Lys Phe
 1           5           10           15
Ala Asp Asp Thr Thr Val Val Gly Leu Ile Thr Asp Asn Asp Glu Ala
      20           25           30
Ala Tyr Arg Glu Glu Val Arg Asp Leu Ala Val Trp Cys Gln Asp Asn
      35           40           45
Asn Leu Ser Leu Asn Val Ile Lys Thr Thr Lys Met Ile Val Asp Tyr
      50           55           60
Arg Lys Arg Arg Val Glu His Ala Pro Ile Leu Ile Asp Gly Ala Val
      65           70           75           80
Trp Glu Pro Val Glu Ser Phe Lys Phe Leu Gly Val His Ile Thr Ile
      85           90           95
Glu Leu Ser Trp Ser Lys His Thr Lys Thr Val Val Lys Arg Val Arg
      100          105          110
Gln Cys Leu Phe His Leu Gly Arg Gln Lys Arg Phe Gly Met Asp Pro
      115          120          125
Gln Thr Leu Lys Lys Phe Asp Ile Tyr Thr Ile Glu Ser Ile Met Thr
      130          135          140
Gly Cys Ile Thr Ala Trp Tyr Gly Asn Cys Ser Ala Ser Asp Arg Lys
      145          150          155          160
Ala Leu Gln Arg Val Val Arg Thr Ala Gln Tyr Ile Thr Gly Ala Lys
      165          170          175
Leu Pro Ala Ile Gln Asp Leu Tyr Thr Arg Arg Cys Gln Arg Lys Thr
      180          185          190
Leu Thr Ile
      195

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&lt;210&gt; 961

&lt;211&gt; 502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 961

```

acgcgttgtc gtctctccgt agaccattca gtttggcaaa acttccactg gagtctgtgc
60
atgactggat ggtctctttg acagccctgt caaggaatac caacagaata ttgattctcc
120
taaactgtat agtaacctgc taaccagtcg gaaagagcta ccacccaatg gagatactaa
180
atccatggta atggaccatc gagggcaacc tccagagttg gctgctcttc ccactcctga
240
gtctacaccc gtgcttcacc agaagaccct gcaggccatg aagagccact cagaaaaggc
300
ccatggccat ggagcttcaa ggaaagaaac ccctcagttt tttccgtcta gtccgccacc
360
tcattcccca ataagtcatg ggcatatccc cagtgccatt gttcttccaa atgctaccca
420
tgactacaac acgtctttct caaactccaa tgctcacaaa gctgaaaaga agcttcaaaa
480
cattgatcac cccttcacgc gt
502

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<210> 962  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 962  
 Met Val Met Asp His Arg Gly Gln Pro Pro Glu Leu Ala Ala Leu Pro  
 1 5 10 15  
 Thr Pro Glu Ser Thr Pro Val Leu His Gln Lys Thr Leu Gln Ala Met  
 20 25 30  
 Lys Ser His Ser Glu Lys Ala His Gly His Gly Ala Ser Arg Lys Glu  
 35 40 45  
 Thr Pro Gln Phe Phe Pro Ser Ser Pro Pro Pro His Ser Pro Ile Ser  
 50 55 60  
 His Gly His Ile Pro Ser Ala Ile Val Leu Pro Asn Ala Thr His Asp  
 65 70 75 80  
 Tyr Asn Thr Ser Phe Ser Asn Ser Asn Ala His Lys Ala Glu Lys Lys  
 85 90 95  
 Leu Gln Asn Ile Asp His Pro Phe Thr Arg  
 100 105

<210> 963  
 <211> 1298  
 <212> DNA  
 <213> Homo sapiens

<400> 963  
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 60  
 gcgctctaga ggagatgaat tatggatccg ccctcccga atcctggctc ggccctcccc  
 120  
 acgccaccca gggccagtcg ggtctgctca cagcccagag aggcgcgtg tccagccgcg  
 180  
 ggcaagagac agagcaggtc cctgtgtatc caagtccctg agcccgtgac accggcccca  
 240  
 ggccctgtag agagccagca gccaccatgg cgaaggagga agatgaggag aagaaagcca  
 300  
 agaaagggaa gaaggggaag aaggcaccgg acccgagaa gcccaaacgg agcctgaagg  
 360  
 ggacgtcgcg ggtgttcatt ggcttcgcg accgaacacc caagatctac aagaagggcc  
 420  
 agttccgcag cgcctcggcc ttcttctggg gcctccacac cggcccccac aagaccaagc  
 480  
 gcacgaggaa ggcccgcacc gtgctcgggt acacgtcaga gcttatgacg cacatgcgca  
 540  
 tgggcaagaa gaagcgggag atgaagggca agaagccgtc cttcatgggt atccgcttcc  
 600  
 caggccgccc tggctacggc cgcctgcggc cgcgcgccc gtcactcagc aaagcgtcca  
 660  
 cggccatcaa ctgggtcaca aaaaagttcc tcctcaagaa ggccgaggag tcgggcagcg  
 720  
 aacaggccac agtggacgcc tggctgcagc gctcgagctc ccgcatgggc tcccgcgaac  
 780

tccccctccc gtcgggtgcc gagatcctgc ggccctggggg ccggtccgg aggttcccc  
 840  
 gcagccgcag catctacgcg tcaggcgagc ccctgggctt cctgcccttc gaggacgagg  
 900  
 cccattcca tcaactcgggc tcccgcaagt cgctgtacgg gcttgagggc ttccaggacc  
 960  
 tgggagagta ttatgactat caccgcgacg gcgacgacta ctacgaccgg cagtcactcc  
 1020  
 accgtacga ggagcaggaa ccctacctgg cgggcctcgg cccctacagc ccggcctggc  
 1080  
 caccctacgg cgaccactac tacgggtacc cgcccagga tccctacgac tactaccacc  
 1140  
 ccgactatta cgggtggcccc gttgatccgg ggtacaccta cggctacggc tacgacgatt  
 1200  
 acgaaccccc atatgcgcc ccgtcggggg actcgtctcc ttacagctac cagcatgggt  
 1260  
 acgagggcga ggcgcaccc tatggctact acctggat  
 1298

<210> 964

<211> 235

<212> PRT

<213> Homo sapiens

<400> 964

Ser	Ala	Ser	Gln	Ala	Ala	Val	Ala	Thr	Ala	Ala	Cys	Gly	Arg	Ala	Pro
1			5					10						15	
Gly	His	Ser	Ala	Lys	Arg	Pro	Arg	Pro	Ser	Thr	Gly	Ser	Gln	Lys	Ser
			20					25					30		
Ser	Ser	Ser	Arg	Arg	Pro	Arg	Ser	Arg	Ala	Ala	Asn	Arg	Pro	Gln	Trp
			35				40					45			
Thr	Pro	Gly	Cys	Ser	Ala	Arg	Ala	Pro	Ala	Trp	Ala	Pro	Ala	Asn	Ser
			50				55				60				
Pro	Ser	Arg	Arg	Val	Pro	Arg	Ser	Cys	Gly	Leu	Gly	Ala	Gly	Ser	Gly
65					70				75					80	
Gly	Ser	Pro	Ala	Ala	Ala	Ala	Ser	Thr	Arg	Gln	Ala	Ser	Pro	Trp	Ala
			85					90						95	
Ser	Cys	Pro	Ser	Arg	Thr	Arg	Pro	His	Ser	Ile	Thr	Arg	Ala	Pro	Ala
			100				105						110		
Ser	Arg	Cys	Thr	Gly	Leu	Arg	Ala	Ser	Arg	Thr	Trp	Ala	Ser	Ile	Met
			115				120					125			
Thr	Ile	Thr	Ala	Thr	Ala	Thr	Thr	Thr	Thr	Gly	Ser	His	Ser	Thr	
			130				135					140			
Ala	Thr	Arg	Ser	Arg	Asn	Pro	Thr	Trp	Arg	Ala	Ser	Ala	Pro	Thr	Ala
145					150					155					160
Arg	Pro	Gly	His	Pro	Thr	Ala	Thr	Thr	Thr	Gly	Thr	Arg	Pro	Arg	
			165					170					175		
Ile	Pro	Thr	Thr	Thr	Thr	Pro	Thr	Ile	Thr	Val	Ala	Pro	Leu	Ile	
			180				185					190			
Arg	Gly	Thr	Pro	Thr	Ala	Thr	Ala	Thr	Thr	Ile	Thr	Asn	Pro	His	Met
			195				200					205			
Arg	Pro	Arg	Arg	Gly	Thr	Arg	Leu	Leu	Thr	Ala	Thr	Thr	Met	Gly	Thr
			210				215					220			
Arg	Ala	Arg	Arg	Thr	Leu	Met	Ala	Thr	Thr	Trp					

225

230

235

&lt;210&gt; 965

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 965

```

nnngtgacca ttatgggtgg tgcccggtacc cgtgaagtgg aaggcggtga ttttgttggc
60
cgggtcagcg atgccgaaaa ggctgaaatc ctcggccgcg ccgatgtgta tgtcgcccc
120
aataccggcg gtgagagctt tggcattgtc ttggtggaag ccatggcggc aggcgcagcc
180
gttgttgctt cagacttga ggccttccgc gcagtgtgca acgccgattc cgatgatgtt
240
gccggcgcg tatatcgcaa tgaggatagt aatgaccttg ctcgtgtact caacgaggtg
300
ctcaggagtc ctgagtatcg tgcccgctta gtgcac
336

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&lt;210&gt; 966

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 966

Xaa	Val	Thr	Ile	Met	Gly	Gly	Ala	Arg	Thr	Arg	Glu	Val	Glu	Gly	Val
1				5				10					15		
Asp	Phe	Val	Gly	Arg	Val	Ser	Asp	Ala	Glu	Lys	Ala	Glu	Ile	Leu	Gly
			20					25					30		
Arg	Ala	Asp	Val	Tyr	Val	Ala	Pro	Asn	Thr	Gly	Gly	Glu	Ser	Phe	Gly
			35					40					45		
Ile	Val	Leu	Val	Glu	Ala	Met	Ala	Ala	Gly	Ala	Ala	Val	Val	Ala	Ser
			50					55				60			
Asp	Leu	Glu	Ala	Phe	Arg	Ala	Val	Cys	Asn	Ala	Asp	Ser	Asp	Asp	Val
65					70					75				80	
Ala	Gly	Ala	Leu	Tyr	Arg	Asn	Glu	Asp	Ser	Asn	Asp	Leu	Ala	Arg	Val
				85						90				95	
Leu	Asn	Glu	Val	Leu	Glu	Asp	Pro	Glu	Tyr	Arg	Ala	Arg	Leu	Val	His
			100					105					110		

&lt;210&gt; 967

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 967

```

ncaaatggca attcatagcc cgccagatcg gacacggagc tgggtggtatc cacggattcg
60
ggcgcgagg cgctgggctc aagctccgct tcggcaccgg tcggcactga ggaatctccg
120
tcggcctccg cttcgggcgc agcctgggct gcgccagact ctgcgggagg caccttctcc
180

```

cgggttcgcc agccaaatgg cgttgcaggc tccagcatcc agtccggtgc cttcggcacc  
 240  
 cccgcactgc gcagagaggc cgccagaaac gatggcaccg gcggcgcggg aggtgataca  
 300  
 ggcgcttcgg ccggagcgct cacggactcc ggcactacag gtgcagcttg cgcttcctgc  
 360  
 ggcggagcaa cagggtcact tcgaggcggg gat  
 393

<210> 968

<211> 125

<212> PRT

<213> Homo sapiens

<400> 968

Pro	Ala	Arg	Ser	Asp	Thr	Glu	Leu	Val	Val	Ser	Thr	Asp	Ser	Gly	Ala
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Glu	Ala	Ser	Gly	Ser	Ser	Ser	Ala	Ser	Ala	Pro	Val	Gly	Thr	Glu	Glu
			20					25					30		
Ser	Pro	Ser	Ala	Ser	Ala	Ser	Ala	Ala	Ala	Trp	Ala	Ala	Pro	Asp	Ser
			35				40					45			
Ala	Gly	Gly	Thr	Phe	Ser	Arg	Val	Arg	Gln	Pro	Asn	Gly	Val	Ala	Gly
	50					55				60					
Ser	Ser	Ile	Gln	Ser	Gly	Ala	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Glu
65					70				75					80	
Ala	Ala	Arg	Asn	Asp	Gly	Thr	Gly	Gly	Ala	Gly	Gly	Asp	Thr	Gly	Ala
			85					90						95	
Ser	Ala	Gly	Ala	Leu	Thr	Asp	Ser	Gly	Thr	Thr	Gly	Ala	Ala	Cys	Ala
			100					105					110		
Ser	Cys	Gly	Gly	Ala	Thr	Gly	Ser	Leu	Arg	Gly	Gly	Asp			
		115					120					125			

<210> 969

<211> 880

<212> DNA

<213> Homo sapiens

<400> 969

caattgtcat gcaggacacc aaagatgaac acaggcttca cagtggcaaa ctctgtctga  
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 ttatccttac atgtattgca gaggatcaat atgaccatgc atttttgcat gatgatcaac  
 120  
 atgaattttc gagtaaaactt acatagaatg cctatgagac acaggaagaa ggcagcagac  
 180  
 aagaatctta ccttgccgctc tttagtatgt gaagtactgg acctgatggt agagttttatt  
 240  
 gtaacacaca tgatgaagga gtttctctatg gatctctata tacgctgcat ccaggtagta  
 300  
 cacaaactgc tctgctacca gaagaagtgt cgggtacgcc tgcattacac ctggcggggag  
 360  
 ctctggctcag ccttgataaa tttgctgaag ttccttatgt caaatgagac tgtacttttg  
 420  
 gccaaacaca acattttttac attagccctt atgattgtga acctatttaa tatgtttatc  
 480

acatatggcg acacatttct gccaaccccc agcagctatg atgaacttta ctatgagatt  
 540  
 atccgcatgc accagagctt tgacaacctc tactccatgg tcctgaggct ttctaccaat  
 600  
 gcaggccagt ggaaggaagc agctagcaag gtgacccatg cattgggtaa tatcagagcc  
 660  
 atcatcaacc actttaaccc caaaattgag tcctacgctg ctgtgaatca catatcccaa  
 720  
 ctgtcagagg agcaggtgct ggaggtgggtg agagccaact atgacacgct cacgctgaag  
 780  
 ctgcaggatg gcctggacca gtatgagcgc tactcagagc agcacaagga agctgccttc  
 840  
 ttcaaagagc tggttcgatc cattagcacc aacgtccgga  
 880

<210> 970

<211> 263

<212> PRT

<213> Homo sapiens

<400> 970

Met	Thr	Met	His	Phe	Cys	Met	Met	Ile	Asn	Met	Asn	Phe	Arg	Val	Asn
1				5					10					15	
Leu	His	Arg	Met	Pro	Met	Arg	His	Arg	Lys	Lys	Ala	Ala	Asp	Lys	Asn
			20					25					30		
Leu	Thr	Leu	Pro	Ser	Leu	Val	Cys	Glu	Val	Leu	Asp	Leu	Met	Val	Glu
		35					40					45			
Phe	Ile	Val	Thr	His	Met	Met	Lys	Glu	Phe	Pro	Met	Asp	Leu	Tyr	Ile
	50					55					60				
Arg	Cys	Ile	Gln	Val	Val	His	Lys	Leu	Leu	Cys	Tyr	Gln	Lys	Lys	Cys
65					70					75					80
Arg	Val	Arg	Leu	His	Tyr	Thr	Trp	Arg	Glu	Leu	Trp	Ser	Ala	Leu	Ile
				85					90					95	
Asn	Leu	Leu	Lys	Phe	Leu	Met	Ser	Asn	Glu	Thr	Val	Leu	Leu	Ala	Lys
			100					105						110	
His	Asn	Ile	Phe	Thr	Leu	Ala	Leu	Met	Ile	Val	Asn	Leu	Phe	Asn	Met
		115					120						125		
Phe	Ile	Thr	Tyr	Gly	Asp	Thr	Phe	Leu	Pro	Thr	Pro	Ser	Ser	Tyr	Asp
	130					135					140				
Glu	Leu	Tyr	Tyr	Glu	Ile	Ile	Arg	Met	His	Gln	Ser	Phe	Asp	Asn	Leu
145					150					155					160
Tyr	Ser	Met	Val	Leu	Arg	Leu	Ser	Thr	Asn	Ala	Gly	Gln	Trp	Lys	Glu
				165					170					175	
Ala	Ala	Ser	Lys	Val	Thr	His	Ala	Leu	Val	Asn	Ile	Arg	Ala	Ile	Ile
			180					185						190	
Asn	His	Phe	Asn	Pro	Lys	Ile	Glu	Ser	Tyr	Ala	Ala	Val	Asn	His	Ile
		195				200						205			
Ser	Gln	Leu	Ser	Glu	Glu	Gln	Val	Leu	Glu	Val	Val	Arg	Ala	Asn	Tyr
	210					215					220				
Asp	Thr	Leu	Thr	Leu	Lys	Leu	Gln	Asp	Gly	Leu	Asp	Gln	Tyr	Glu	Arg
225					230					235					240
Tyr	Ser	Glu	Gln	His	Lys	Glu	Ala	Ala	Phe	Phe	Lys	Glu	Leu	Val	Arg
				245					250						255
Ser	Ile	Ser	Thr	Asn	Val	Arg									

260

<210> 971  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

<400> 971  
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 cgcggtcggtg gtggtgcagg cttccccact ggggtgaaat ggtcctttgt tccccaaaac  
 120  
 aatcccaacc ccaaatacct ggttggttaac ggagacgaat ccgaaccggg cacgtgcaag  
 180  
 gacatgccgc tcattatggc aagcccgac acgcttgctg aagggtgctct tatctccgcg  
 240  
 tacgctttcg gatccgagca ggctttcatc tacctccgtg gagaagttgt tcaggtagcc  
 300  
 cggcgccttg aagaaaaaaaa aaaaatgcga nnnnnnn  
 337

<210> 972  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 972  
 Ser Arg Gly Leu Thr Met Glu Pro Ser Glu Val Leu Asn Leu Ile Lys  
 1 5 10 15  
 Asp Ser Gly Leu Arg Gly Arg Gly Gly Ala Gly Phe Pro Thr Gly Val  
 20 25 30  
 Lys Trp Ser Phe Val Pro Gln Asn Asn Pro Asn Pro Lys Tyr Leu Val  
 35 40 45  
 Val Asn Gly Asp Glu Ser Glu Pro Gly Thr Cys Lys Asp Met Pro Leu  
 50 55 60  
 Ile Met Ala Ser Pro His Thr Leu Val Glu Gly Ala Leu Ile Ser Arg  
 65 70 75 80  
 Tyr Ala Phe Gly Ser Glu Gln Ala Phe Ile Tyr Leu Arg Gly Glu Val  
 85 90 95  
 Val Gln Val Ala Arg Arg Leu Glu Glu Lys Lys Lys Met Arg Xaa Xaa  
 100 105 110

<210> 973  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 973  
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 60  
 ccagcagggc ggcacagcca aggaaatggc atggtcctgc tgcattggtc tcagtggggg  
 120  
 ccgggacctt ctgtataggc atcacttagg aaccagtcag accatcagat tctcaggacc  
 180



cactggatca actgagtcag gaactcaggg ttttcaacac atcctccggg gggattccag  
 240  
 tggctgtgta actttgagga ccactggcaa agtggctctg gggtcagaga tccgagttca  
 300  
 tattctgggt ctgcctctga ctgactgcaa cgggtgggcaa gtcacttgcc gtgcccagcc  
 360

<210> 974

<211> 91

<212> PRT

<213> Homo sapiens

<400> 974

Met	Ala	Trp	Ser	Cys	Cys	Met	Val	Leu	Ser	Gly	Val	Arg	Asp	Leu	Leu
1				5				10					15		
Tyr	Arg	His	His	Leu	Gly	Thr	Ser	Gln	Thr	Ile	Arg	Phe	Ser	Gly	Pro
			20					25					30		
Thr	Gly	Ser	Thr	Glu	Ser	Gly	Thr	Gln	Gly	Phe	Gln	His	Ile	Leu	Arg
		35					40					45			
Gly	Asp	Ser	Ser	Gly	Cys	Val	Thr	Leu	Arg	Thr	Thr	Gly	Lys	Val	Ala
	50					55					60				
Leu	Gly	Ser	Glu	Ile	Arg	Val	His	Ile	Leu	Gly	Leu	Pro	Leu	Thr	Asp
65					70					75				80	
Cys	Asn	Gly	Gly	Gln	Val	Thr	Cys	Arg	Ala	Gln					
				85					90						

<210> 975

<211> 2604

<212> DNA

<213> Homo sapiens

<400> 975

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 ccagacattt cctctccgaa ttcaaacctg acagagctct gcctattgac cgtccgaaca  
 120  
 ccttgataa gtgggtttctg attttgagag gacagcagag ggctgtatca cacaagacat  
 180  
 ttggcattag cctggaagag gtccctgggtga acgagtttac ccgccgcaag catcttgaac  
 240  
 tgaccagcca cgatgcaggt tgaagaagcc accggtcagg ctgcggggccg tcgtcgggga  
 300  
 aacgtgggtgc gaagggtgtt tggccgcata cggcgctttt tcagtcgcag gcggaatgag  
 360  
 cccaccttgc cccgggagtt cactcgccgt gggcgctcgag gtgcagtgtc tgtggatagt  
 420  
 ctggctgagc tggaagacgg agccctgctg ctgcagaccc tgcagctttc aaaaatttcc  
 480  
 tttccaattg gccaacgact tctgggatcc aaaaggaaga tgagtctcaa tccgattgag  
 540  
 aaacaaatcc cccaggttgt tgaggcttgc tgccaattca ttgaaaaaca tggcttaagc  
 600  
 gcagtgggga tttttaccct tgaatactcc gtgcagcgag tgcgtcagct ccgtgaagaa  
 660

ttt gat caag gtctggatgt agtgctggat gacaatcaga atgtgcatga tgtggctgca  
720  
ctcctcaagg agt t t t t t c c g t g a c a t g a a g g a t t c t c t g c t g c c a g a t g a t c t g t a c a t g  
780  
t c a t t c e t c c t g a c a g c a a c t t t a a a g c c c c a g g a t c a g c t t t c t g c c c t g c a g t t g c t g  
840  
g t c t a c c t g a c g c c a c c c t g c c a c a g t g a t a c c c t g g a g c g t c t g c t g a a g g c c c t g c a t  
900  
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c g t a t g a c t t c c a c t a a c t t g g c c t t g g t g t t t g g a t c t g c t c t c c t g a a a a a g g a a a g  
1020  
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1440  
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1800  
t g a c a t t t g t g g t a a c a c c t t t c c c a g g g a a c c t c a c a a a t c t t g a g a t g c t t t c c c t t  
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2280

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 <213> Homo sapiens

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 35 40 45  
 Arg Gly Ala Val Ser Val Asp Ser Leu Ala Glu Leu Glu Asp Gly Ala  
 50 55 60  
 Leu Leu Leu Gln Thr Leu Gln Leu Ser Lys Ile Ser Phe Pro Ile Gly  
 65 70 75 80  
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 85 90 95  
 Lys Gln Ile Pro Gln Val Val Glu Ala Cys Cys Gln Phe Ile Glu Lys  
 100 105 110  
 His Gly Leu Ser Ala Val Gly Ile Phe Thr Leu Glu Tyr Ser Val Gln  
 115 120 125  
 Arg Val Arg Gln Leu Arg Glu Glu Phe Asp Gln Gly Leu Asp Val Val  
 130 135 140  
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 145 150 155 160  
 Phe Phe Arg Asp Met Lys Asp Ser Leu Leu Pro Asp Asp Leu Tyr Met  
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 260 265 270  
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305              310              315              320
Arg Lys Ile Gln Ser Ala Arg Ile Lys Met Glu Glu Asp Ala Leu Leu
      325              330              335
Ser Asp Pro Val Glu Thr Ser Ala Glu Ala Arg Ala Ala Val Leu Ala
      340              345              350
Gln Ser Lys Pro Ser Asp Glu Gly Ser Ser Glu Glu Pro Ala Val Pro
      355              360              365
Ser Gly Thr Ala Arg Ser His Asp Asp Glu Glu Gly Ala Gly Asn Pro
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Pro Ile Pro Glu Gln Asp Arg Pro Leu Leu Arg Val Pro Arg Glu Lys
385              390              395              400
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&lt;210&gt; 977

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 977

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378

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&lt;210&gt; 978

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 978

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Glu Met Pro Ser Arg Thr Leu Arg Gln Ala Ser His Glu Ser Ile Glu
      20              25              30
Asp Ser Met Asn Ser Tyr Gly Ser Glu Gly Asn Leu Asn Tyr Gly Gly
      35              40              45
Val Cys Leu Ala Ser Asp Ala Gln Phe Ser Asp Phe Leu Gly Ser Met
      50              55              60
Gly Pro Ala Gln Phe Val Gly Arg Gln Thr Leu Ala Thr Thr Pro Met

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				85				90						95	
Asp	Ile	Ile	Gln	Ala	Arg	Gly	Leu	Thr	Ala	Lys	Pro	Gly	Ser	Lys	Thr
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<211> 73

<212> PRT

<213> Homo sapiens

<400> 980

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		20						25				30			
Cys	Phe	Gln	Val	Leu	Thr	Ala	Ser	Gly	Trp	Ser	Leu	Glu	Ala	Thr	Glu
		35					40					45			
Glu	Arg	Asn	Ala	Trp	Leu	Arg	Ala	Ala	Glu	His	Ser	Glu	Ala	Ser	Arg
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<210> 981

<211> 404

<212> DNA

<213> Homo sapiens

<400> 981

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<211> 134

<212> PRT

<213> Homo sapiens

<400> 982

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			20				25					30			
Thr	Ala	Pro	Val	Gly	Trp	Glu	Leu	Val	Arg	Val	Glu	His	Val	Glu	Leu
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Asp	Asp	Glu	Asp	Val	Asp	Asp	Glu	Asn	Thr	Asp	Ile	Thr	Ala	Leu	Ala
	50				55					60					
Glu	Ala	Gly	Ala	Arg	Gly	Gly	Ala	Gly	Asn	His	Arg	Phe	Gly	Gly	Asp
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Arg	Pro	Gly	Ser	Asp	Arg	Val	Leu	Gly	Arg	Gln	Arg	Leu	Gln	Gln	Pro
			85					90					95		
Arg	His	Leu	Gln	Pro	Ser	Gly	Ala	Pro	Asp	Gln	Ala	Cys	Gly	Gly	Thr
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Ala	Ser	Gly	Ala	Gln	Gly	Gly	Ala	Pro	Leu	Pro	Pro	Ala	His	Cys	Pro
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<210> 983

<211> 579

<212> DNA

<213> Homo sapiens

<400> 983

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<210> 984

<211> 103

<212> PRT

<213> Homo sapiens

<400> 984

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			20					25					30		
Ile	Thr	Leu	Asn	Ile	Thr	His	Ser	Pro	Ala	Thr	Leu	Ala	Ser	Leu	
		35					40				45				
Leu	Phe	Pro	Lys	Arg	Ala	Arg	Tyr	Pro	Ser	Phe	Ser	Gly	Pro	Leu	Tyr
	50					55				60					
Leu	Phe	Phe	Ser	Leu	Pro	Glu	Thr	Pro	Phe	Leu	Leu	Asn	Asn	Leu	Met
65					70					75					80
Ser	Cys	Pro	Ser	Thr	Ser	Ser	Val	Leu	Lys	Cys	His	Leu	Pro	Arg	Glu
				85				90						95	
Val	Phe	Pro	Asp	Gln	His	Ile									
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<210> 985

<211> 313

<212> DNA

<213> Homo sapiens

<400> 985

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 180  
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<210> 986

<211> 98

<212> PRT

<213> Homo sapiens

<400> 986

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Ala Asn Phe Lys Ala His Asp Leu Lys Leu Val Thr Glu Ile Asn His			
	35	40	45
Leu Asp Asn Gln Ile Phe Ile Asp Tyr Ala Lys Leu Ile Lys Glu Ser			
	50	55	60
Asp Ala Leu Pro Val Asp Gln Gln Val Ala Phe Phe Leu Asn Asn Met			
65	70	75	80
Gln Ser Ile Ile Asp Gly Lys Pro Glu Leu Asn Ile Thr Glu Leu Ser			
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Gly Phe			

&lt;210&gt; 987

&lt;211&gt; 4224

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 987

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&lt;210&gt; 988

&lt;211&gt; 873

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 988

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 Met Leu Leu Arg Gly Leu Thr Gln Ile Gln Ser Arg Ile Leu Gly Pro  
 35 40 45  
 Gly Arg Lys Cys Cys Ala Leu Ala Asn Leu Ala Asp Met Leu Thr Val  
 50 55 60  
 Phe Ala Leu Thr Glu Asp Asp Pro Gln Glu Val Ser Ala Thr Val Tyr  
 65 70 75 80  
 Leu Asp Lys Leu Ala Thr Val Ile Ser Val Trp Asn Ser Asp Thr Gln  
 85 90 95  
 Asn Pro Tyr His Gln Gln Ala Leu Ala Glu Lys Val Lys Glu Ala Glu  
 100 105 110  
 Arg Asp Val Ser Leu Thr Ser Leu Ala Lys Leu Pro Ser Glu Thr Ile  
 115 120 125  
 Phe Val Gly Cys Glu Phe Leu His His Leu Leu Arg Glu Trp Gly Glu  
 130 135 140  
 Glu Leu Gln Ala Val Leu Arg Ser Ser Gln Gly Thr Ser Tyr Asp Ser  
 145 150 155 160  
 Tyr Arg Leu Cys Asp Ser Leu Thr Ser Phe Ser Gln Asn Ala Thr Leu  
 165 170 175  
 Tyr Leu Asn Arg Thr Ser Leu Ser Lys Glu Asp Arg Gln Val Val Ser  
 180 185 190  
 Glu Leu Ala Glu Cys Val Arg Asp Phe Leu Arg Lys Thr Ser Thr Val  
 195 200 205  
 Leu Lys Asn Arg Ala Leu Glu Asp Ile Thr Ala Ser Ile Ala Met Ala  
 210 215 220  
 Val Ile Gln Gln Lys Met Asp Arg His Met Glu Val Cys Tyr Ile Phe  
 225 230 235 240  
 Ala Ser Glu Lys Lys Trp Ala Phe Ser Asp Glu Trp Val Ala Cys Leu  
 245 250 255  
 Gly Ser Asn Arg Ala Leu Phe Arg Glu Pro Asp Leu Val Leu Arg Leu  
 260 265 270  
 Leu Glu Thr Val Ile Asp Val Ser Thr Ala Asp Arg Ala Ile Pro Glu  
 275 280 285  
 Ser Gln Ile Arg Gln Val Ile His Leu Ile Leu Glu Cys Tyr Ala Asp  
 290 295 300  
 Leu Ser Leu Pro Gly Lys Asn Lys Val Leu Ala Gly Ile Leu Arg Ser  
 305 310 315 320  
 Trp Gly Arg Lys Gly Leu Ser Glu Lys Leu Leu Ala Tyr Val Glu Gly  
 325 330 335  
 Phe Gln Glu Asp Leu Asn Thr Thr Phe Asn Gln Leu Thr Gln Ser Ala  
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 Ser Glu Gln Gly Leu Ala Lys Ala Val Ala Ser Val Ala Arg Leu Val  
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 Ile Val His Pro Glu Val Thr Val Lys Lys Met Cys Ser Leu Ala Val

370	375	380
Val Asn Leu Gly Thr	His Lys Phe Leu Ala Gln Ile Leu Thr Ala Phe	
385	390	395
Pro Ala Leu Arg Phe Val Glu Val Gln Gly Pro Asn Ser Ser Ala Thr		400
	405	410
Phe Met Val Ser Cys Leu Lys Glu Thr Val Trp Met Lys Phe Ser Thr		415
	420	425
Pro Lys Glu Glu Lys Gln Phe Leu Glu Leu Leu Asn Cys Leu Met Ser		430
	435	440
Pro Val Lys Pro Gln Gly Ile Pro Val Ala Ala Leu Leu Glu Pro Asp		445
	450	455
Glu Val Leu Lys Glu Phe Val Leu Pro Phe Leu Arg Leu Asp Val Glu		460
465	470	475
Glu Val Asp Leu Ser Leu Arg Ile Phe Ile Gln Thr Leu Glu Ala Asn		480
	485	490
Ala Cys Arg Glu Glu Tyr Trp Leu Gln Thr Cys Ser Pro Phe Pro Leu		495
	500	505
Leu Phe Ser Leu Cys Gln Leu Leu Asp Arg Phe Ser Lys Tyr Trp Gln		510
	515	520
Leu Pro Lys Glu Lys Arg Cys Leu Ser Leu Asp Arg Lys Asp Leu Ala		525
	530	535
Ile His Ile Leu Glu Leu Leu Cys Glu Ile Val Ser Ala Asn Ala Glu		540
545	550	555
Thr Phe Ser Pro Asp Val Trp Ile Lys Ser Leu Ser Trp Leu His Arg		560
	565	570
Lys Leu Glu Gln Leu Asp Trp Thr Val Gly Leu Arg Leu Lys Ser Phe		575
	580	585
Phe Glu Gly His Phe Lys Cys Glu Val Pro Ala Thr Leu Phe Glu Ile		590
	595	600
Cys Lys Leu Ser Glu Asp Glu Trp Thr Ser Gln Ala His Pro Gly Tyr		605
	610	615
Gly Ala Gly Thr Gly Leu Leu Ala Trp Met Glu Cys Cys Cys Val Ser		620
625	630	635
Ser Gly Ile Ser Glu Arg Met Leu Ser Leu Leu Val Val Asp Val Gly		640
	645	650
Asn Pro Glu Glu Val Arg Leu Phe Ser Lys Gly Phe Leu Val Ala Leu		655
	660	665
Val Gln Val Met Pro Trp Cys Ser Pro Gln Glu Trp Gln Arg Leu His		670
	675	680
Gln Leu Thr Arg Arg Leu Leu Glu Lys Gln Leu Leu His Val Pro Tyr		685
	690	695
Ser Leu Glu Tyr Ile Gln Phe Val Pro Leu Leu Asn Leu Lys Pro Phe		700
705	710	715
Ala Gln Glu Leu Gln Leu Ser Val Leu Phe Leu Arg Thr Phe Gln Phe		720
	725	730
Leu Cys Ser His Ser Cys Arg Asn Trp Leu Pro Leu Glu Gly Trp Asn		735
	740	745
His Val Val Lys Leu Leu Cys Gly Ser Leu Thr Arg Leu Leu Asp Ser		750
	755	760
Val Arg Ala Ile Gln Ala Ala Gly Pro Trp Val Gln Gly Pro Glu Gln		765
	770	775
Asp Leu Thr Gln Glu Ala Leu Phe Val Tyr Thr Gln Val Phe Cys His		780
785	790	795
Ala Leu His Ile Met Ala Met Leu His Pro Glu Val Cys Glu Pro Leu		800

	805		810		815
Tyr Val Leu Ala Leu Glu Thr Leu Thr Cys Tyr Glu Thr Leu Ser Lys					
	820		825		830
Thr Asn Pro Ser Val Ser Ser Leu Leu Gln Arg Ala His Glu Gln Cys					
	835		840		845
Phe Leu Lys Ser Ile Ala Glu Gly Ile Gly Pro Glu Glu Arg Arg Gln					
	850		855		860
Thr Leu Leu Gln Lys Met Ser Ser Phe					
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&lt;210&gt; 989

&lt;211&gt; 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 989

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&lt;210&gt; 990

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 990

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1	5	10	15
Cys Pro Pro Gly Asp Thr Pro Val Asp Val Leu Ser Gly Gly Glu Arg			
	20	25	30
Arg Arg Val Ala Leu Cys Lys Leu Leu Ile Glu Gln Pro Asp Leu Leu			
	35	40	45
Leu Leu Asp Glu Pro Thr Asn His Leu Asp Ala Glu Ser Val Asn Trp			
	50	55	60
Leu Glu Gly His Leu Lys Ser Tyr Pro Gly Ala Val Leu Ala Val Thr			
65	70	75	80
His Asp Arg Tyr Phe Leu Asp His Val Ala Glu Trp Ile Cys Glu Val			
	85	90	95
Asp Arg Gly Gln Leu His Pro Tyr Glu Gly Asn Tyr Ser Thr Tyr Leu			
	100	105	110
Asp Thr Lys Arg Lys Arg Leu Gln Ile Glu Gly Lys Lys Asp Ala Lys			
	115	120	125
Arg Ala Lys Ile Leu Glu			

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<210> 991  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

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 Lys Ser Ala Phe Leu Pro Leu Ile Ala Gln Phe Leu Gly Val Asp Gly  
 35 40 45  
 Tyr Trp Leu Thr Thr Gly Asn Thr Glu Asp Ser Phe Arg Glu Ser Asp  
 50 55 60  
 Val Phe Ser Pro Thr Val Val Ser Ala Glu Ser Thr Asp Gln Tyr Val  
 65 70 75 80  
 Trp Ile Glu Val Val Glu Ala Asn Phe Ser Cys Gly Thr Gly Glu Ser  
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<210> 993  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

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 120



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<210> 994

<211> 110

<212> PRT

<213> Homo sapiens

<400> 994

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Glu	Ile	Pro	Ala	Gln	Gly	Arg	Thr	Ser	Cys	Tyr	Asp	Arg	Cys	Met	Ile
			20					25					30		
Tyr	Leu	Ser	Gln	Asp	Tyr	Ile	Gly	Glu	Leu	Pro	Lys	Gln	His	Ile	Ser
			35				40					45			
Leu	Gly	Lys	Phe	Asp	Pro	Asp	Asn	Ile	Pro	Ala	Asp	Pro	Asn	Glu	Leu
			50				55				60				
Phe	Ala	Thr	Trp	Phe	Lys	Glu	Ala	Val	Glu	Asn	Glu	Val	Gly	Asp	Pro
65					70				75					80	
Thr	Ala	Val	Thr	Val	Ala	Thr	Val	Asp	Asp	Asn	Gly	Gln	Pro	Asp	Ala
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<210> 995

<211> 924

<212> DNA

<213> Homo sapiens

<400> 995

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<210> 996

<211> 308

<212> PRT

<213> Homo sapiens

<400> 996

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Leu	Met	Gln	Gln	Gly	Glu	Phe	Leu	Asn	Tyr	Asp	Met	Leu	Ile	Gly	Val
		35					40					45			
Asn	Gln	Gly	Glu	Gly	Leu	Lys	Phe	Val	Glu	Asp	Ser	Ala	Glu	Ser	Glu
		50				55					60				
Asp	Gly	Val	Ser	Ala	Ser	Ala	Phe	Asp	Phe	Thr	Val	Ser	Asn	Phe	Val
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Asp	Asn	Leu	Tyr	Gly	Tyr	Pro	Glu	Gly	Lys	Asp	Val	Leu	Arg	Glu	Thr
			85					90						95	
Ile	Lys	Phe	Met	Tyr	Thr	Asp	Trp	Ala	Asp	Arg	Asp	Asn	Gly	Glu	Met
			100					105					110		
Arg	Arg	Lys	Thr	Leu	Leu	Ala	Leu	Phe	Thr	Asp	His	Gln	Trp	Val	Ala
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Pro	Ala	Val	Ala	Thr	Ala	Lys	Leu	His	Ala	Asp	Tyr	Gln	Ser	Pro	Val
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Tyr	Phe	Tyr	Thr	Phe	Tyr	His	His	Cys	Gln	Ala	Glu	Gly	Arg	Pro	Glu
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Trp	Ala	Asp	Ala	Ala	His	Gly	Asp	Glu	Leu	Pro	Tyr	Val	Phe	Gly	Val
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Pro	Met	Val	Gly	Ala	Thr	Asp	Leu	Phe	Pro	Cys	Asn	Phe	Ser	Lys	Asn
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Asp	Val	Met	Leu	Ser	Ala	Val	Val	Met	Thr	Tyr	Trp	Thr	Asn	Phe	Ala
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Lys	Thr	Gly	Asp	Pro	Asn	Gln	Pro	Val	Pro	Gln	Asp	Thr	Lys	Phe	Ile
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His	Thr	Lys	Pro	Asn	Arg	Phe	Glu	Glu	Val	Val	Trp	Ser	Lys	Phe	Asn

225									230									235									240
Ser	Lys	Glu	Lys	Gln	Tyr	Leu	His	Ile	Gly	Leu	Lys	Pro	Arg	Val	Arg												
					245						250						255										
Asp	Asn	Tyr	Arg	Ala	Asn	Lys	Val	Ala	Phe	Trp	Leu	Glu	Leu	Val	Pro												
					260						265						270										
His	Leu	His	Asn	Leu	His	Thr	Glu	Leu	Phe	Thr	Thr	Thr	Thr	Arg	Leu												
					275						280						285										
Pro	Pro	Tyr	Ala	Thr	Arg	Trp	Pro	Pro	Arg	Pro	Pro	Ala	Gly	Ala	Pro												
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Gly	Thr	Arg	Arg																								
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<210> 997

<211> 320

<212> DNA

<213> Homo sapiens

<400> 997

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120
gccttgctct tgttcggtgc ctttgccgct attatgtacg gtctcattct acttgattct
180
acctgggttag ccttactcgg tatcgatgta cgagggtggtg ccatcgaata ttgggcgaag
240
atgttcaaaa taggtattgg tactgaagag cttcgttacc ctatctttat gcaagatatg
300
tttgatttgc gccacgcgt
320

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<210> 998

<211> 106

<212> PRT

<213> Homo sapiens

<400> 998

Lys 1	Phe	Asn	Thr	Ile 5	Ala	Phe	Ser	Trp	Leu 10	Ile	Leu	Leu	Gly	Met 15	Ser
Tyr	Gly	Ile	Lys 20	Thr	Gly	Ile	His	Leu 25	Gly	Val	Asp	Ile	Val	Leu 30	Asn
Ala	Val	Pro	Lys 35	Arg	Val	Ser	Arg 40	Ala	Leu	Ser	Leu	Phe	Gly	Ala 45	Phe
Ala 50	Ala	Ile	Met	Tyr	Gly	Leu 55	Ile	Leu	Leu	Asp	Ser 60	Thr	Trp	Leu	Ala
Leu 65	Leu	Gly	Ile	Asp 70	Val	Arg	Gly	Gly	Ala	Ile 75	Glu	Tyr	Trp	Ala 80	Lys
Met	Phe	Lys	Ile 85	Gly	Ile	Gly	Thr	Glu 90	Glu	Leu	Arg	Tyr	Pro	Ile 95	Phe
Met	Gln	Asp	Met 100	Phe	Asp	Leu	Arg 105	Pro	Arg						

<210> 999

<211> 401

<212> DNA

<213> Homo sapiens

<400> 999

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acgcggttcag gcggttaaca atcgcgctaa gaagctgacc aaggaaaatg tcggcatggt
60
acatctgagc aagagcttca tcggtgttta tctctactca gaaggcaagt ttgtgaccag
120
caactatctc aatcgtggct acaaggacat tctgagctat gcagacgatg ctagtctttt
180
gcaaaagcct ccagcagtggt cttcagatga tctggataca ggtctcttga agagggcctt
240
ggatgagtggt gtggctgatg ctaagaacca cattctcaat actgaaaact tctttagcgg
300
gtcaaccggt ctcaacattg acagtttcta cgtctttggt gaccaagaca tctgctggca
360
gttggcagct attctgagtc agagcatgaa tcgggaattg t
401

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<210> 1000

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1000

[illegible]

<210> 1001

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1001

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60  
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120  
atcggtatga ttgtcttccc gctgtttggt ctggcgatga tccttcgggg tctgctaact  
180

aacttcttcg ctggtggtgc cgctggagtc tttggcaacg cgatgggagg acgtaaaggg  
 240  
 gcaattattg gcggcgtagt gcacgggctg tttatcaccc tgttaccagc gatgctaata  
 300  
 cccttactgg aaaccttcgg cttcaaagge gtcaccttca gtgattccga t  
 351

<210> 1002

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1002

Arg	Gly	Ile	Ala	Met	Arg	Leu	Val	Pro	Asn	Ala	Lys	Pro	Ala	Leu	Asp
1				5					10					15	
Cys	Pro	Val	Leu	Phe	Pro	Tyr	Ala	Pro	Asn	Ala	Val	Ile	Val	Gly	Phe
			20					25					30		
Leu	Ala	Thr	Thr	Val	Gly	Ser	Ile	Ile	Gly	Met	Ile	Val	Phe	Pro	Leu
		35					40					45			
Phe	Gly	Leu	Ala	Met	Ile	Leu	Pro	Gly	Leu	Leu	Thr	Asn	Phe	Phe	Ala
	50					55					60				
Gly	Gly	Ala	Ala	Gly	Val	Phe	Gly	Asn	Ala	Met	Gly	Gly	Arg	Lys	Gly
65					70				75					80	
Ala	Ile	Ile	Gly	Gly	Val	Val	His	Gly	Leu	Phe	Ile	Thr	Leu	Leu	Pro
				85					90					95	
Ala	Met	Leu	Ile	Pro	Leu	Leu	Glu	Thr	Phe	Gly	Phe	Lys	Gly	Val	Thr
			100					105						110	
Phe	Ser	Asp	Ser	Asp											
			115												

<210> 1003

<211> 444

<212> DNA

<213> Homo sapiens

<400> 1003

acgcgtcctc cttagtcga tcgcgaatat gataggcgaa gcgacgtgat ggtgtgacgc  
 60  
 acgagcactg ccccatctcc taggcttagg gttatgcaga ctcccatcga cgctacctcc  
 120  
 acccccgcat ggggcacact ctccggccta aagtccegc tgcgtgacgg gccacataaa  
 180  
 ctgcgccgtt tgttcgacgc cgaccctcac cgcgctgagc gctacacctt tgacgtcgcg  
 240  
 gatttgcacg tcgatttata gaagaacctc cttaccgacg agattcgtga cgctctcctc  
 300  
 gaactggctg cgcagatgcg cgtcaccgag cgtcgtgacg cgatgtatgc cggtgagcac  
 360  
 atcaacgtca ccgaggaccg cgccgtcctc cataccgcgc tgtgtcgtcc ccgcaactgac  
 420  
 gagctgcatg ttgacgggtca ggat  
 444

<210> 1004

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1004

```

Met Gln Thr Pro Ile Asp Ala Thr Ser Thr Pro Ala Trp Gly Thr Leu
 1           5           10           15
Ser Gly Leu Lys Ser Arg Phe Ala Asp Gly Pro His Lys Leu Arg Arg
      20           25           30
Leu Phe Asp Ala Asp Pro His Arg Ala Glu Arg Tyr Thr Phe Asp Val
      35           40           45
Ala Asp Leu His Val Asp Leu Ser Lys Asn Leu Leu Thr Asp Glu Ile
      50           55           60
Arg Asp Ala Leu Leu Glu Leu Ala Ala Gln Met Arg Val Thr Glu Arg
65           70           75           80
Arg Asp Ala Met Tyr Ala Gly Glu His Ile Asn Val Thr Glu Asp Arg
      85           90           95
Ala Val Leu His Thr Ala Leu Cys Arg Pro Arg Thr Asp Glu Leu His
      100          105          110
Val Asp Gly Gln Asp
      115

```

&lt;210&gt; 1005

&lt;211&gt; 299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1005

```

ccatggccat tcctctggtg actgcatcca gtccgatgga tttaaaccacc cccaatgtgc
60
tggtgactcc caagtttaca cctccagcca gggcttctct cctggggttg catacccacc
120
tatctatctg ccttagccac tcgtgtctga cgagcacctc acacctccag aggctcctca
180
tttcttccca tgctgcttc tcccacactc ctccctctca catgagggca acttcacct
240
cccagttgct caggccccaa acctccatca gttttgactc ttctctcgca cactactcg
299

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&lt;210&gt; 1006

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1006

```

Met Ala Ile Pro Leu Val Thr Ala Ser Ser Pro Met Asp Leu Asn Thr
 1           5           10           15
Pro Asn Val Leu Val Thr Pro Lys Phe Thr Pro Pro Ala Arg Ala Ser
      20           25           30
Leu Leu Gly Leu His Thr His Leu Ser Ile Cys Leu Ser His Ser Cys
      35           40           45
Leu Thr Ser Thr Ser His Leu Gln Arg Leu Leu Ile Ser Ser His Ala
      50           55           60
Cys Phe Ser His Thr Pro Pro Ser His Met Arg Ala Thr Ser Ser Ser

```



ngccttcacg gctgntatgc ctggcctcat ccccatccct ggcacccgtg acgatagcca  
 60  
 cattccactg gtgtttcccc aggaaagcca accctacctg catctcagca gagcttccac  
 120  
 ggagttggaa ccccgctccg agaggggtgtg ggctcagggg ccaggggtca cacaaactcc  
 180  
 agaaggagga cgtagttggt ttgcaaggct gtcctttgcc ctggttgaat aaccttcggt  
 240  
 ctgccccgag aggaacgtgg gcattaggct gcacccgcag gaagccatgt attttctgag  
 300  
 aaacttgccc catggtgcag atct  
 324

<210> 1010

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1010

Met	Gly	Gln	Val	Ser	Gln	Lys	Ile	His	Gly	Phe	Leu	Arg	Val	Gln	Pro
1				5					10					15	
Asn	Ala	His	Val	Pro	Leu	Gly	Ala	Asp	Arg	Arg	Leu	Phe	Asn	Gln	Gly
			20					25					30		
Lys	Gly	Gln	Pro	Cys	Lys	Pro	Thr	Thr	Ser	Ser	Phe	Trp	Ser	Leu	Cys
		35					40					45			
Asp	Pro	Trp	Pro	Leu	Ser	Pro	His	Pro	Leu	Gly	Ala	Gly	Phe	Gln	Leu
	50					55					60				
Arg	Gly	Ser	Ser	Ala	Glu	Met	Gln	Val	Gly	Leu	Ala	Phe	Leu	Gly	Lys
65					70				75					80	
His	Gln	Trp	Asn	Val	Ala	Ile	Val	Thr	Gly	Ala	Arg	Asp	Gly	Asp	Glu
			85					90					95		
Ala	Arg	His	Xaa	Ser	His	Glu	Gly								
						100									

<210> 1011

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1011

ctgcagaaaa ggagggggtt cccatgccaa ggcagaactg tctgggacag acgctgcccg  
 60  
 gatccctgcg gctgcctgca ctctggacca cgagctctga gagcagcagg ttgagggccg  
 120  
 gtgggacagca gctcggaggc tccgcgaggt gcaggagacg caggcatggc cggtgagctg  
 180  
 actcctgagg aggaggccca gtacaaaaag gctttctccg cggttgacac ggatggaaac  
 240  
 ggcaccatca atgccagga gctgggcgcg gcgctgaagg ccacgggcaa gaacctctcg  
 300  
 gaggccagc taaagaaact catctccgag  
 330

<210> 1012



<211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 1012  
 Met Ala Gly Glu Leu Thr Pro Glu Glu Glu Ala Gln Tyr Lys Lys Ala  
 1 5 10 15  
 Phe Ser Ala Val Asp Thr Asp Gly Asn Gly Thr Ile Asn Ala Gln Glu  
 20 25 30  
 Leu Gly Ala Ala Leu Lys Ala Thr Gly Lys Asn Leu Ser Glu Ala Gln  
 35 40 45  
 Leu Lys Lys Leu Ile Ser Glu  
 50 55

<210> 1013  
 <211> 432  
 <212> DNA  
 <213> Homo sapiens

<400> 1013  
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 60  
 tggcgggcgtc tcctcgtcgc cgggagcggc gaggaaggat taacgatgac cagcgacgtc  
 120 -  
 cccgggattg gctcgaacgc cgccactttg gcgcgttccc aggetcgcag tgacaaggtc  
 180  
 gaggetgatt tggcgggtcca tcccgacaag tggcgcatte tgggggggga ccgtcctact  
 240  
 ggcagcctgc acatcgggtca ctacttcggg tcgctggcga atcgggtacg cgtgcagaac  
 300  
 aagggcattg agtctttcct tgctcgtcgt gactaccagg ttatctatga ccgcgggggg  
 360  
 ggtggtgacc tgcaggccaa tggtatgtcg aatgtcgccg attacctggc aatcggcatt  
 420  
 gacccaacgc gt  
 432

<210> 1014  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1014  
 Met Thr Ser Asp Val Pro Gly Ile Gly Ser Asn Ala Ala Thr Leu Ala  
 1 5 10 15  
 Arg Ser Gln Ala Arg Ser Asp Lys Val Glu Ala Asp Leu Ala Val His  
 20 25 30  
 Pro Asp Lys Trp Arg Ile Leu Gly Ser Asp Arg Pro Thr Gly Ser Leu  
 35 40 45  
 His Ile Gly His Tyr Phe Gly Ser Leu Ala Asn Arg Val Arg Val Gln  
 50 55 60  
 Asn Lys Gly Ile Glu Ser Phe Leu Val Val Ala Asp Tyr Gln Val Ile  
 65 70 75 80  
 Tyr Asp Arg Gly Gly Gly Gly Asp Leu Gln Ala Asn Val Met Ser Asn

	85		90		95							
Val	Ala	Asp	Tyr	Leu	Ala	Ile	Gly	Ile	Asp	Pro	Thr	Arg
	100							105				

<210> 1015  
 <211> 467  
 <212> DNA  
 <213> Homo sapiens

<400> 1015  
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 60  
 gaaaacttcc cgatgaaagc gcgcacgggt gaagagctga aagaattgga aagagtttta  
 120  
 cagcaaaaga agattgaagc agagtgtcctt aaactacgga aggaaattgt agaggctcag  
 180  
 tctggagtta agttgagga acagcgtcat gaagaggatg atgaagaaga ggaagaggaa  
 240  
 gacaagacag taaaatatag caatttgccc aattacctgc ttggtagtct gagtactgat  
 300  
 tttggggtag atacctcttt attgtcaagc caattggagc ttcattccag agaagagaaa  
 360  
 atcaacccaaa ttatattatt gaaagatatt atttacaagg taaaaactgt tttcaataat  
 420  
 gagtttgacg ctgcatataa acaaaaagag tttgaaattg cacgcgt  
 467

<210> 1016  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 1016  
 Xaa Asn Ser Met Ala Val Lys Gly Arg Ala Leu Lys Cys Phe His Ile  
 1 5 10 15  
 Pro Cys Val Val Glu Asn Phe Pro Met Lys Ala Arg Thr Val Glu Glu  
 20 25 30  
 Leu Lys Glu Leu Glu Arg Val Leu Gln Gln Lys Lys Ile Glu Ala Glu  
 35 40 45  
 Cys Leu Lys Leu Arg Lys Glu Ile Val Glu Ala Gln Ser Gly Val Lys  
 50 55 60  
 Leu Ile Lys Gln Arg His Glu Glu Asp Asp Glu Glu Glu Glu Glu Glu  
 65 70 75 80  
 Asp Lys Thr Val Lys Tyr Ser Asn Leu Pro Asn Tyr Leu Leu Gly Ser  
 85 90 95  
 Leu Ser Thr Asp Phe Gly Val Asp Thr Ser Leu Leu Ser Ser Gln Leu  
 100 105 110  
 Glu Leu His Ser Arg Glu Glu Lys Ile Asn Gln Ile Ile Leu Leu Lys  
 115 120 125  
 Asp Ile Ile Tyr Lys Val Lys Thr Val Phe Asn Asn Glu Phe Asp Ala  
 130 135 140  
 Ala Tyr Lys Gln Lys Glu Phe Glu Ile Ala Arg  
 145 150 155

<210> 1017  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 1017  
 acgcgtggct gggtgggtat gtggaaccat gtgcgcgcta atgagaagga tgcgaagggg  
 60  
 aacattaaag tgggtcgccc cggctacttt gcggagggtca tggatttcta tgcgcattat  
 120  
 ctgaaggggtg cggttacccg tttccgtccg aattttattg tgcaggataa tacggggccgt  
 180  
 tggcgtgttc agtcgtcgtg gccgcagccg aatcgcactg ttacttttgc gggacccccg  
 240  
 ggcattgtcc gctacgggtac gacgttggcg gccgcacgc atgggaatgg tcaggttatt  
 300  
 ccgcaggcgg atgcacagtc tcttaaccgc gagaa  
 335

<210> 1018  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1018  
 Met Trp Asn His Val Arg Ala Asn Glu Lys Asp Ala Lys Gly Asn Ile  
 1 5 10 15  
 Lys Val Gly Arg Pro Gly Tyr Phe Ala Glu Val Met Asp Phe Tyr Ala  
 20 25 30  
 His Tyr Leu Lys Gly Ala Val Thr Arg Phe Arg Pro Asn Phe Ile Val  
 35 40 45  
 Gln Asp Asn Thr Gly Arg Trp Arg Val Gln Ser Ser Trp Pro Gln Pro  
 50 55 60  
 Asn Arg Thr Val Thr Phe Ala Gly Pro Arg Gly Ile Val Arg Tyr Gly  
 65 70 75 80  
 Thr Thr Leu Ala Ala Arg Thr His Gly Asn Gly Gln Ala Ile Pro Gln  
 85 90 95  
 Ala Asp Ala Gln Ser Leu Asn Arg Glu  
 100 105

<210> 1019  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<400> 1019  
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 ctctggagcc tcctcctcaa tggcgttgcc catggtgcct ggcttgggtg atgaggcggg  
 120  
 tgaagggcgt ggggccaggt ggtgcgggat gaagtcagcc tcgttgaaga gtcctgtggct  
 180  
 ggaggagccg ctgcctgagc cttcagggcc cagtgtgccc agggggccacc gacagagtgg  
 240

cagagagcag gtgacttcct ggcactgcgg agcgaggacc cggagaagta cttcctcaat  
 300  
 ggtggctgga ccatccagtg gaacggggac taccaggtgg cagggaccac cttcacatac  
 360  
 gcacgcaggg gcaactggga gaacctcacg tccccgggtc ccaccaagga gcctgtctgg  
 420  
 atccagctgc tgttccagga gagcaaccct gggg  
 454

<210> 1020

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1020

Met	Ala	Leu	Pro	Met	Val	Pro	Gly	Leu	Gly	Asp	Glu	Ala	Gly	Glu	Gly
1				5					10					15	
Arg	Gly	Ala	Arg	Trp	Cys	Gly	Met	Lys	Ser	Ala	Ser	Leu	Lys	Ser	Ser
			20					25					30		
Trp	Leu	Glu	Glu	Pro	Leu	Pro	Glu	Pro	Ser	Gly	Pro	Ser	Val	Pro	Arg
		35					40					45			
Gly	His	Arg	Gln	Ser	Gly	Arg	Glu	Gln	Val	Thr	Ser	Trp	His	Cys	Gly
	50					55					60				
Ala	Arg	Thr	Arg	Arg	Ser	Thr	Ser	Ser	Met	Val	Ala	Gly	Pro	Ser	Ser
65					70					75				80	
Gly	Thr	Gly	Thr	Thr	Arg	Trp	Gln	Gly	Pro	Pro	Ser	His	Thr	His	Ala
			85					90					95		
Gly	Ala	Thr	Gly	Arg	Thr	Ser	Arg	Pro	Arg	Val	Pro	Pro	Arg	Ser	Leu
			100					105					110		
Ser	Gly	Ser	Ser	Cys	Cys	Ser	Arg	Arg	Ala	Thr	Leu	Gly			
		115					120					125			

<210> 1021

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1021

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 gccgagatta tctgacagga ccaaagcata taaagttgac tgaagcagga gcaaacacgc  
 120  
 tggttgaggg tcaagtgtg gggcagcagc aacaacaaac caaaaaaag ccctttgaac  
 180  
 tcccttaatg ttgcccaaag gttctggtag agaacaagtc acatgcctaa gaaggtcttt  
 240  
 taaagggcac tcttgagtt tcagcatttg gtccggggaa ttgcacaagg ctctgcttaa  
 300  
 atgcagagct ctttctagca tttcatatt caaggcggaa aaactgagct tggcgaggaa  
 360  
 ccctgt  
 366

<210> 1022

<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1022  
 Met Lys Met Leu Glu Arg Ala Leu His Leu Ser Arg Ala Leu Cys Asn  
 1 5 10 15  
 Ser Pro Asp Gln Met Leu Lys Leu Gln Glu Cys Pro Leu Lys Asp Leu  
 20 25 30  
 Leu Arg His Val Thr Cys Ser Leu Pro Glu Pro Leu Gly Asn Ile Lys  
 35 40 45  
 Gly Val Gln Arg Ala Phe Phe Trp Phe Val Val Ala Ala Ala Pro Ala  
 50 55 60  
 Leu Asp Pro Gln Pro Ala Cys Leu Leu Leu Leu Gln Ser Thr Leu Tyr  
 65 70 75 80  
 Ala Leu Val Leu Ser Asp Asn Leu Gly Ser Met Ser Ile Phe His Ala  
 85 90 95  
 Leu Pro Leu Ser Gly Leu Gln Glu Val Thr Thr Gln Leu  
 100 105

<210> 1023  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1023  
 gccgggcttc ggggtctctga agcgatcaac ctggccgact cggatgcaga tctggacggc  
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 ggcacccctga ccatacagca gaccaagttt ggcaagtccc gcatgggtgcc gctacacccc  
 120  
 agcgtgatcg gtccgatggc agcctaccgg gccttgccgc gccagtacgt gcctgcgaag  
 180  
 ccgcagatga cattcttcgt gggctcgcgt ggcgtgcacc ggggtgaacc gctgggagat  
 240  
 aggcaggtgc atcgagtgtt ctgtcagctg cgcgagcaat tgggttgat cgatcgcggc  
 300  
 ggccatggcc gaccgcgggt gcatgacctg cgccatagct tcgccgtgag acggatgatc  
 360  
 ctgtggcacc agcagggagc gaaccttgac caacgaatgc tggccctgtc cacgtacatg  
 420  
 ggccac  
 426

<210> 1024  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1024  
 Ala Gly Leu Arg Val Ser Glu Ala Ile Asn Leu Ala Asp Ser Asp Ala  
 1 5 10 15  
 Asp Leu Asp Gly Gly Ile Leu Thr Ile Gln Gln Thr Lys Phe Gly Lys  
 20 25 30  
 Ser Arg Met Val Pro Leu His Pro Ser Val Ile Gly Pro Met Ala Ala

	35					40				45					
Tyr	Arg	Ala	Leu	Arg	Arg	Gln	Tyr	Val	Pro	Ala	Lys	Pro	Gln	Met	Thr
	50					55					60				
Phe	Phe	Val	Gly	Ser	Arg	Gly	Val	His	Arg	Gly	Glu	Pro	Leu	Gly	Asp
65					70					75					80
Arg	Gln	Val	His	Arg	Val	Phe	Cys	Gln	Leu	Arg	Glu	Gln	Leu	Gly	Trp
			85					90						95	
Ile	Asp	Arg	Gly	Gly	His	Gly	Arg	Pro	Arg	Val	His	Asp	Leu	Arg	His
		100						105					110		
Ser	Phe	Ala	Val	Arg	Arg	Met	Ile	Leu	Trp	His	Gln	Gln	Gly	Ala	Asn
		115						120				125			
Leu	Asp	Gln	Arg	Met	Leu	Ala	Leu	Ser	Thr	Tyr	Met	Gly	His		
	130					135					140				

&lt;210&gt; 1025

&lt;211&gt; 518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1025

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naccgctgggt gcgcgcaggt ggccgcgcgg tccctttgct ccctgcgcaa gccggagggg
60
tgcccagaag gctaccacta gcctcagcga aggggtgcgc ctgagagccg ggtagcctcg
120
gatagcggcg ctgcgtacgc gatgatggat gagccgtgggt gggaagggcg cgtcgcctcg
180
gacgtccact gcaccctgcg cgagaaggaa ctgaagctgc ccaccttccg agcccactcc
240
ccactcctga agagccgccc gttcttcgtg gacatcctga ccctgctgag cagccactgc
300
cagctctgcc ctgcagcccc gcacctggcc gtctacctgc tggaccactt catggatcgc
360
tacaacgtca ccacctccaa gcagctctac accgtggccg tctcctgcct cctgcttgca
420
agtaagtctg aggatcggga agaccacgtc cccaagtgg agcaaataaa cagcacgagg
480
atcctgagca gccagaactt caccctcacc aagaagga
518

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&lt;210&gt; 1026

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1026

Met	Met	Asp	Glu	Pro	Trp	Trp	Glu	Gly	Arg	Val	Ala	Ser	Asp	Val	His
1				5					10					15	
Cys	Thr	Leu	Arg	Glu	Lys	Glu	Leu	Lys	Leu	Pro	Thr	Phe	Arg	Ala	His
			20					25					30		
Ser	Pro	Leu	Leu	Lys	Ser	Arg	Arg	Phe	Phe	Val	Asp	Ile	Leu	Thr	Leu
		35					40				45				
Leu	Ser	Ser	His	Cys	Gln	Leu	Cys	Pro	Ala	Ala	Arg	His	Leu	Ala	Val
	50					55					60				
Tyr	Leu	Leu	Asp	His	Phe	Met	Asp	Arg	Tyr	Asn	Val	Thr	Thr	Ser	Lys

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65              70              75              80
Gln Leu Tyr Thr Val Ala Val Ser Cys Leu Leu Leu Ala Ser Lys Phe
              85              90              95
Glu Asp Arg Glu Asp His Val Pro Lys Leu Glu Gln Ile Asn Ser Thr
              100              105              110
Arg Ile Leu Ser Ser Gln Asn Phe Thr Leu Thr Lys Lys
              115              120              125

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&lt;210&gt; 1027

&lt;211&gt; 465

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1027

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&lt;210&gt; 1028

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1028

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Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys Asp His
1              5              10              15
Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Lys Ala Met Arg
              20              25              30
Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser Leu Val Asn Thr
              35              40              45
Xaa Pro Glu Ala His His Xaa Trp Leu Lys Val Ile Thr Ala Asn Ile
              50              55              60
Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp Gln Glu Leu Leu Val
65              70              75              80
Lys Ile Pro Leu Asp Met Val Ala Gly Phe Asn Thr Pro Leu Val Lys
              85              90              95
Thr Ile Val Glu Phe His Met Thr Thr Glu Ala Gln Ala Thr Ile Arg
              100              105              110
Met Asp Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys
              115              120              125
Ala Thr Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser

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 <212> DNA  
 <213> Homo sapiens

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 Ala Asn Arg Trp Gly Lys Ser Phe Thr Gly Gly Asn Pro Leu Gly Ser  
 35 40 45  
 Pro Cys Asp Ser Cys Thr Arg Ser Ser Gly Pro Ala Arg Asp Asn Phe  
 50 55 60  
 Pro His Leu Val Ser Asn Asn Asn Asn Asn Tyr Thr Leu Met Ser Ser  
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 Cys Ser Ala Arg His Leu Trp Pro Val Leu Gly Arg Gln Tyr Leu Phe  
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 Glu Pro Ser His Ser Ser Val Arg Thr Val Ser Leu His Ala  
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<210> 1031  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 1031



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<210> 1032

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1032

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			20				25						30		
Ala	Gly	Thr	His	Tyr	Arg	Tyr	Asn	Ile	Asp	Gly	Glu	Thr	Asp	Val	Pro
			35				40					45			
Asp	Pro	Ala	Ser	Arg	Ala	Gln	Ala	Asn	Asp	Val	His	Gly	Trp	Ser	Val
			50				55				60				
Val	Val	Asp	Pro	Leu	Ala	Tyr	Gln	Trp	Arg	His	Pro	Asn	Trp	Gln	Gly
65					70				75					80	
Arg	Pro	Trp	His	Glu	Ala	Val	Ile	Tyr	Glu	Leu	His	Val	Gly	Val	Leu
			85					90					95		
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<210> 1033

<211> 579

<212> DNA

<213> Homo sapiens

<400> 1033

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 360  
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 480  
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 Ile Gly Ile Lys Gly Ala His Val Ile Lys Asp Gly Lys Ala Asp Arg  
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 Gly Ile Phe Phe Cys Gly Thr Gly Met Gly Met Ala Ile Thr Ala Asn  
 65 70 75 80  
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 Glu Arg Leu Ile Met Ser Asn Asp Ala His Val Leu Cys Leu Gly Gln  
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<210> 1035  
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 363

<210> 1036  
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<213> Homo sapiens

<400> 1036

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			20				25					30			
Val	Cys	Val	Xaa	Glu	Ala	Val	Cys	Ile	Cys	Xaa	Cys	Leu	Cys	Ala	Cys
			35				40					45			
Thr	Xaa	Met	Cys	Ala	Cys	Met	Glu	Cys	Ile	Cys	Val	Cys	Val	Trp	Thr
			50			55					60				
Val	Cys	Val	Ile	Met	Gln	Tyr	Val	Arg	Val	Cys	Val	Trp	Ser	Val	Ser
65					70					75					80
Val	Trp	His	Val	Cys	Val	Tyr	Leu	Leu	Cys	Val	Ser	Val	Cys	Val	Xaa
				85					90				95		
Thr	Cys	Ile	Cys	Ile	Glu	Ser	Val	Cys	Ala	Val	Cys	Met	Cys	Val	Ser
			100					105					110		
Ile	Glu	Arg	Val	Gly	Asp	Val	Val	Xaa							
			115					120							

<210> 1037

<211> 5832

<212> DNA

<213> Homo sapiens

<400> 1037

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840

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<210> 1038  
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 <212> PRT  
 <213> Homo sapiens

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 Gln Gly Asn Tyr Ser Arg Pro Pro Ala Tyr Ser Gly Val Pro Ser Ala  
 35 40 45  
 Ser Tyr Ser Gly Pro Gly Pro Gly Met Gly Ile Ser Ala Asn Asn Gln  
 50 55 60  
 Met His Gly Gln Gly Pro Ser Gln Pro Cys Gly Ala Val Pro Leu Gly  
 65 70 75 80  
 Arg Met Pro Ser Ala Gly Met Gln Asn Arg Pro Phe Pro Gly Asn Met  
 85 90 95  
 Ser Ser Met Thr Pro Ser Ser Pro Gly Met Ser Gln Gln Gly Gly Pro  
 100 105 110  
 Gly Met Gly Pro Pro Met Pro Thr Val Asn Arg Lys Ala Gln Glu Ala  
 115 120 125  
 Ala Ala Ala Val Met Gln Ala Ala Ala Asn Ser Ala Gln Ser Arg Gln  
 130 135 140  
 Gly Ser Phe Pro Gly Met Asn Gln Ser Gly Leu Met Ala Ser Ser Ser  
 145 150 155 160  
 Pro Tyr Ser Gln Pro Met Asn Asn Ser Ser Ser Leu Met Asn Thr Gln  
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 Ala Pro Pro Tyr Ser Met Ala Pro Ala Met Val Asn Ser Ser Ala Ala  
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 Ser Val Gly Leu Ala Asp Met Met Ser Pro Gly Glu Ser Lys Leu Pro  
 195 200 205  
 Leu Pro Leu Lys Ala Asp Gly Lys Glu Glu Gly Thr Pro Gln Pro Glu  
 210 215 220  
 Ser Lys Ser Lys Asp Ser Tyr Ser Ser Gln Gly Ile Ser Gln Pro Pro  
 225 230 235 240  
 Thr Pro Gly Asn Leu Pro Val Pro Ser Pro Met Ser Pro Ser Ser Ala  
 245 250 255  
 Ser Ile Ser Ser Phe His Gly Asp Glu Ser Asp Ser Ile Ser Ser Pro  
 260 265 270  
 Gly Trp Pro Lys Thr Pro Ser Ser Pro Lys Ser Ser Ser Thr Thr  
 275 280 285  
 Thr Gly Glu Lys Ile Thr Lys Val Tyr Glu Leu Gly Asn Glu Pro Glu  
 290 295 300  
 Arg Lys Leu Trp Val Asp Arg Tyr Leu Thr Phe Met Glu Glu Arg Gly  
 305 310 315 320  
 Ser Pro Val Ser Ser Leu Pro Ala Val Gly Lys Lys Pro Leu Asp Leu

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Asn	Lys	Asn	Lys	Lys	Trp	Arg	Glu	Leu	Ala	Thr	Asn	Leu	Asn	Val	Gly																
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Thr	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Leu	Lys	Lys	Gln	Tyr	Ile	Gln	Tyr																
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385																						390							400		
Glu	Val	Phe	Ser	Thr	Gly	Asp	Thr	Lys	Lys	Gln	Pro	Lys	Leu	Gln	Pro																
															405							410							415		
Pro	Ser	Pro	Ala	Asn	Ser	Gly	Ser	Leu	Gln	Gly	Pro	Gln	Thr	Pro	Gln																
															420							425							430		
Ser	Thr	Gly	Ser	Asn	Ser	Met	Ala	Glu	Val	Pro	Gly	Asp	Leu	Lys	Pro																
															435							440							445		
Pro	Thr	Pro	Ala	Ser	Thr	Pro	His	Gly	Gln	Met	Thr	Pro	Met	Gln	Gly																
															450							455							460		
Gly	Arg	Ser	Ser	Thr	Ile	Ser	Val	His	Asp	Pro	Phe	Ser	Asp	Val	Ser																
465																						470							475		
Asp	Ser	Ser	Phe	Pro	Lys	Arg	Asn	Ser	Met	Thr	Pro	Asn	Ala	Pro	Tyr																
															485							490							495		
Gln	Gln	Gly	Met	Ser	Met	Pro	Asp	Val	Met	Gly	Arg	Met	Pro	Tyr	Glu																
															500							505							510		
Pro	Asn	Lys	Asp	Pro	Phe	Gly	Gly	Met	Arg	Lys	Val	Pro	Gly	Ser	Ser																
															515							520							525		
Glu	Pro	Phe	Met	Thr	Gln	Gly	Gln	Met	Pro	Asn	Ser	Ser	Met	Gln	Asp																
															530							535							540		
Met	Tyr	Asn	Gln	Ser	Pro	Ser	Gly	Ala	Met	Ser	Asn	Leu	Gly	Met	Gly																
545																						550							555		
Gln	Arg	Gln	Gln	Phe	Pro	Tyr	Gly	Ala	Ser	Tyr	Asp	Arg	Arg	His	Glu																
															565							570							575		
Pro	Tyr	Gly	Gln	Gln	Tyr	Pro	Gly	Gln	Gly	Pro	Pro	Ser	Gly	Gln	Pro																
															580							585							590		
Pro	Tyr	Gly	Gly	His	Gln	Pro	Gly	Leu	Tyr	Pro	Gln	Gln	Pro	Asn	Tyr																
															595							600							605		
Lys	Arg	His	Met	Asp	Gly	Met	Tyr	Gly	Pro	Pro	Ala	Lys	Arg	His	Glu																
															610							615							620		
Gly	Asp	Met	Tyr	Asn	Met	Gln	Tyr	Ser	Ser	Gln	Gln	Gln	Glu	Met	Tyr																
625																						630							635		
Asn	Gln	Tyr	Gly	Gly	Ser	Tyr	Ser	Gly	Pro	Asp	Arg	Arg	Pro	Ile	Gln																
															645							650							655		
Gly	Gln	Tyr	Pro	Tyr	Pro	Tyr	Ser	Arg	Glu	Arg	Met	Gln	Gly	Pro	Gly																
															660							665							670		
Gln	Ile	Gln	Thr	His	Gly	Ile	Pro	Leu	Gln	Met	Met	Gly	Gly	Pro	Leu																
															675							680							685		
Gln	Ser	Ser	Ser	Ser	Glu	Gly	Pro	Gln	Gln	Asn	Met	Trp	Ala	Ala	Arg																
															690							695							700		
Asn	Asp	Met	Pro	Tyr	Pro	Tyr	Gln	Asn	Arg	Gln	Gly	Pro	Gly	Gly	Pro																
705																		</													



		755					760					765				
Thr	Arg	Pro	Pro	Gln	Pro	Ser	Tyr	Gln	Thr	Pro	Pro	Ser	Leu	Pro	Asn	
	770					775					780					
His	Ile	Ser	Arg	Ala	Pro	Ser	Pro	Ala	Ser	Phe	Gln	Arg	Ser	Leu	Glu	
785					790					795					800	
Asn	Arg	Met	Ser	Pro	Ser	Lys	Ser	Pro	Phe	Leu	Pro	Ser	Met	Lys	Met	
				805					810					815		
Gln	Lys	Val	Met	Pro	Thr	Val	Pro	Thr	Ser	Gln	Val	Thr	Gly	Pro	Pro	
			820					825					830			
Pro	Gln	Pro	Pro	Pro	Ile	Arg	Arg	Glu	Ile	Thr	Phe	Pro	Pro	Gly	Ser	
		835					840					845				
Val	Glu	Ala	Ser	Gln	Pro	Val	Leu	Lys	Gln	Arg	Arg	Lys	Ile	Thr	Ser	
	850					855					860					
Lys	Asp	Ile	Val	Thr	Pro	Glu	Ala	Trp	Arg	Val	Met	Met	Ser	Leu	Lys	
865					870					875					880	
Ser	Gly	Leu	Leu	Ala	Glu	Ser	Thr	Trp	Ala	Leu	Asp	Thr	Ile	Asn	Ile	
				885					890					895		
Leu	Leu	Tyr	Asp	Asp	Ser	Thr	Val	Ala	Thr	Phe	Asn	Leu	Ser	Gln	Leu	
			900					905						910		
Ser	Gly	Phe	Leu	Glu	Leu	Leu	Val	Glu	Tyr	Phe	Arg	Lys	Cys	Leu	Ile	
	915						920					925				
Asp	Ile	Phe	Gly	Ile	Leu	Met	Glu	Tyr	Glu	Val	Gly	Asp	Pro	Ser	Gln	
	930					935					940					
Lys	Ala	Leu	Asp	His	Asn	Ala	Ala	Arg	Lys	Asp	Asp	Ser	Gln	Ser	Leu	
945					950					955					960	
Ala	Asp	Asp	Ser	Gly	Lys	Glu	Glu	Glu	Asp	Ala	Glu	Cys	Ile	Asp	Asp	
				965					970					975		
Asp	Glu	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Glu	Asp	Ser	Glu	Lys	Thr	Glu	
			980					985					990			
Ser	Asp	Glu	Lys	Ser	Ser	Ile	Ala	Leu	Thr	Ala	Pro	Asp	Ala	Ala	Ala	
			995				1000					1005				
Asp	Pro	Lys	Glu	Lys	Pro	Lys	Gln	Ala	Ser	Lys	Phe	Asp	Lys	Leu	Pro	
	1010					1015					1020					
Ile	Lys	Ile	Val	Lys	Lys	Asn	Asn	Leu	Phe	Val	Val	Asp	Arg	Ser	Asp	
1025					1030					1035					1040	
Lys	Leu	Gly	Arg	Val	Gln	Glu	Phe	Asn	Ser	Gly	Leu	Leu	His	Trp	Gln	
				1045					1050					1055		
Leu	Gly	Gly	Gly	Asp	Thr	Thr	Glu	His	Ile	Gln	Thr	His	Phe	Glu	Ser	
			1060					1065					1070			
Lys	Met	Glu	Ile	Pro	Pro	Arg	Arg	Arg	Pro	Pro	Pro	Pro	Leu	Ser	Ser	
	1075						1080					1085				
Ala	Gly	Lys	Lys	Lys	Glu	Leu	Ala	Gly	Lys	Gly	Asp	Ser	Glu			

```

1185          1190          1195          1200
Met Ser Lys His Pro Gly Leu Val Leu Ile Leu Gly Lys Leu Ile Leu
          1205          1210          1215
Leu His His Glu His Pro Glu Arg Lys Arg Ala Pro Gln Thr Tyr Glu
          1220          1225          1230
Lys Glu Glu Asp Glu Asp Lys Gly Val Ala Cys Ser Lys Asp Glu Trp
          1235          1240          1245
Trp Trp Asp Cys Leu Glu Val Leu Arg Asp Asn Thr Leu Val Thr Leu
          1250          1255          1260
Ala Asn Ile Ser Gly Gln Leu Asp Leu Ser Ala Tyr Thr Glu Ser Ile
1265          1270          1275          1280
Cys Leu Pro Ile Leu Asp Gly Leu Leu His Trp Met Val Cys Pro Ser
          1285          1290          1295
Ala Glu Ala Gln Asp Pro Phe Pro Thr Val Gly Pro Asn Ser Val Pro
          1300          1305          1310
Ser Pro Gln Arg Leu Val Leu Glu Thr Leu Cys Lys Leu Ser Ile Gln
          1315          1320          1325
Asp Asn Asn Val Asp Leu Ile Leu Ala Thr Pro Pro Phe Ser Arg Gln
          1330          1335          1340
Glu Lys Phe Tyr Ala Thr Leu Val Arg Tyr Val Gly Asp Arg Lys Asn
1345          1350          1355          1360
Pro Val Cys Arg Glu Met Ser Met Ala Leu Leu Ser Asn Leu Ala Gln
          1365          1370          1375
Gly Asp Ala Leu Ala Ala Arg Ala Ile Ala Val Gln Lys Gly Ser Ile
          1380          1385          1390
Gly Asn Leu Ile Ser Phe Leu Glu Asp Gly Val Thr Met Ala Gln Tyr
          1395          1400          1405
Gln Gln Ser Gln His Asn Leu Met His Met Gln Pro Pro Pro Leu Glu
          1410          1415          1420
Pro Pro Ser Val Asp Met Met Cys Arg Ala Ala Lys Ala Leu Leu Ala
1425          1430          1435          1440
Met Ala Arg Val Asp Glu Asn Arg Ser Glu Phe Leu Leu His Glu Gly
          1445          1450          1455
Arg Leu Leu Asp Ile Ser Ile Ser Ala Val Leu Asn Ser Leu Val Ala
          1460          1465          1470
Ser Val Ile Cys Asp Val Leu Phe Gln Ile Gly Gln Leu
          1475          1480          1485

```

&lt;210&gt; 1039

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1039

```

gcaggagcca gggatgctgc tgaacatccc gcagtgcacg agacaggcct ccaccacacg
60
gaattacctt ggcctgaggt gttacgagag cacagagaga aaccaggtac agacgcgggg
120
cagaggggag agaggggagag agtgtgagag ctaaggtttc gggagaagac tttgtggaaa
180
aagtcttttg ctgggtcctg caacatagcc aggattcagt gacaggtgag gaccactcca
240
gattttgtat gtattgaagg ccctgaatac ttttttgaaa gagaatgaca tgagtacacc
300

```

tggtcagcca cacgtgagag gggttggagg aggggaagtac cagaggcagg gagaccaggt  
 360  
 agaaagacct cgccatagt  
 379

<210> 1040  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1040  
 Met Ala Arg Ser Phe Tyr Leu Val Ser Leu Pro Leu Val Leu Pro Ser  
 1 5 10 15  
 Ser Asn Pro Ser His Val Trp Leu Thr Arg Cys Thr His Val Ile Leu  
 20 25 30  
 Phe Gln Lys Ser Ile Gln Gly Leu Gln Tyr Ile Gln Asn Leu Glu Trp  
 35 40 45  
 Ser Ser Pro Val Thr Glu Ser Trp Leu Cys Cys Arg Thr Gln Pro Lys  
 50 55 60  
 Thr Phe Ser Thr Lys Ser Ser Pro Glu Thr Leu Ala Leu Thr Leu Ser  
 65 70 75 80  
 Pro Ser Leu Pro Ser Ala Pro Arg Leu Tyr Leu Val Ser Leu Cys Ala  
 85 90 95  
 Leu Val Thr Pro Gln Ala Lys Val Ile Pro Cys Gly Gly Gly Leu Ser  
 100 105 110  
 Arg Ala Leu Arg Asp Val Gln Gln His Pro Trp Leu Leu  
 115 120 125

<210> 1041  
 <211> 388  
 <212> DNA  
 <213> Homo sapiens

<400> 1041  
 ttagtggccg tggaggccat cggtacatc gcgagtattg acaaggccga tatgtcaatc  
 60  
 gaaacggcgt acctgccgcg gctgttggtt tccttgcccc tgaccatccc ggtgctcgcc  
 120  
 ttgtcgatga tccccgccct gcaacttcccg cattggccgt tgtgggcgtt ggcgcttacc  
 180  
 accccggtgg tgttctgggg tgccctggccg ctgcaccacg ccgcgtggac caacctgcgg  
 240  
 cacggcgccg ccatcatgga caccctgggtg tcgctcggcg tcctcacttc gtacctctgg  
 300  
 tcggtatgga tgctgaccac aggcggcgag cacctctacc tggaggtagc cgtccaccgt  
 360  
 cacgacgctg atcctggccg gcaaattt  
 388

<210> 1042  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1042

```

Leu Val Ala Val Glu Ala Ile Gly Tyr Ile Ala Ser Ile Asp Lys Ala
 1           5           10           15
Asp Met Ser Ile Glu Thr Ala Tyr Leu Pro Arg Leu Leu Val Ser Leu
 20           25           30
Ala Leu Thr Ile Pro Val Leu Ala Leu Ser Met Ile Pro Ala Leu His
 35           40           45
Phe Pro His Trp Pro Leu Trp Ala Leu Ala Leu Thr Thr Pro Val Val
 50           55           60
Phe Trp Gly Ala Trp Pro Leu His His Ala Ala Trp Thr Asn Leu Arg
65           70           75           80
His Gly Ala Ala Ile Met Asp Thr Leu Val Ser Leu Gly Val Leu Thr
 85           90           95
Ser Tyr Leu Trp Ser Val Trp Met Leu Thr Thr Gly Gly Glu His Leu
100          105          110
Tyr Leu Glu Val Ala Val His Arg His Asp Ala Asp Pro Gly Arg Gln
115          120          125
Ile

```

&lt;210&gt; 1043

&lt;211&gt; 555

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1043

```

accggtgaaa ccctgatcgg ccaatcggtt tccaccgttc ccggcggcaa gggcgcaaac
60
caggcggtcg cttcggcgcg tcttggggcc gaagtcgcga tggtcggttg cgtgggtacc
120
gatgcctacg gcgcgcaatt acgcgacgca ttgttggttg aaggcatcga ttgccaggcc
180
gtcagcaccg tcgacggttc cagcgggtgtg gcgctgatcg tggtaggatga cagcagccag
240
aatgcgatcg ttatcgtcgc cggtagcaat ggcgagctga ctccggccaa gttacagacc
300
tttgacagcg tgctgcaggc tgccgacgtg attgtctgcc agcttgagac gccgatggac
360
actgtcggcc atgcgcctaa gcgcggtcgc gaactgggca agacgggtgat cctcaatccg
420
gcgccggcca gcggcccgcg gcctgaggat tggtagcccg ccatcgatta cctgattccc
480
aacgaaagcg aagcctcggc cttgagtggc gtggtgggtg attcactgga cagcgccaag
540
gtcgtgcta cgcgt
555

```

&lt;210&gt; 1044

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1044

```

Thr Gly Glu Thr Leu Ile Gly Gln Ser Phe Ser Thr Val Pro Gly Gly

```

```

      1           5           10           15
Lys Gly Ala Asn Gln Ala Val Ala Ser Ala Arg Leu Gly Ala Glu Val
      20           25           30
Ala Met Val Gly Cys Val Gly Thr Asp Ala Tyr Gly Ala Gln Leu Arg
      35           40           45
Asp Ala Leu Leu Val Glu Gly Ile Asp Cys Gln Ala Val Ser Thr Val
      50           55           60
Asp Gly Ser Ser Gly Val Ala Leu Ile Val Val Asp Asp Ser Ser Gln
      65           70           75           80
Asn Ala Ile Val Ile Val Ala Gly Ser Asn Gly Glu Leu Thr Pro Ala
      85           90           95
Lys Leu Gln Thr Phe Asp Ser Val Leu Gln Ala Ala Asp Val Ile Val
      100          105          110
Cys Gln Leu Glu Thr Pro Met Asp Thr Val Gly His Ala Pro Lys Arg
      115          120          125
Gly Arg Glu Leu Gly Lys Thr Val Ile Leu Asn Pro Ala Pro Ala Ser
      130          135          140
Gly Pro Leu Pro Glu Asp Trp Tyr Ala Ala Ile Asp Tyr Leu Ile Pro
      145          150          155          160
Asn Glu Ser Glu Ala Ser Ala Leu Ser Gly Val Val Val Asp Ser Leu
      165          170          175
Asp Ser Ala Lys Val Ala Ala Thr Arg
      180          185

```

<210> 1045  
 <211> 371  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1045
ctattgccat actaccgccg cggcaaccta caggacatga tcaacgccaa cctcttcaat
60
cactccaaat tccccgagac gcaccttatg aatctatttc tcggcgtctg caaggccctg
120
cgcgccatgc acgattacca cgcaccgccg gcagagcgca tgccaattgg gcaccgaagg
180
cagaccacca cccaggtgca aagcaacagt ggtagagcgg tcgctcatcg acgaaacgta
240
cggaagaaga cgaagagacg gagcaggaaa gacctgttat ggaatcacag aaccacatcg
300
ggcagggcgg cgagcacaaa accatatgcg catcgcgaca ttaaaccagg tacgtgctgc
360
aagctcctcg g
371

```

<210> 1046  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1046
Leu Leu Pro Tyr Tyr Arg Arg Gly Asn Leu Gln Asp Met Ile Asn Ala
1           5           10           15
Asn Leu Phe Asn His Ser Lys Phe Pro Glu Thr His Leu Met Asn Leu

```

20							25					30			
Phe	Leu	Gly	Val	Cys	Lys	Ala	Leu	Arg	Ala	Met	His	Asp	Tyr	His	Ala
35							40					45			
Pro	Pro	Ala	Glu	Arg	Met	Pro	Ile	Gly	His	Arg	Arg	Gln	Thr	Thr	Thr
50							55					60			
Gln	Val	Gln	Ser	Asn	Ser	Gly	Arg	Ala	Val	Ala	His	Arg	Arg	Asn	Val
65							70					75			
Arg	Lys	Lys	Thr	Lys	Arg	Arg	Ser	Arg	Lys	Asp	Leu	Leu	Trp	Asn	His
85							90					95			
Arg	Thr	Thr	Ser	Gly	Arg	Ala	Ala	Ser	Thr	Lys	Pro	Tyr	Ala	His	Arg
100							105					110			
Asp	Ile	Lys	Pro	Gly	Thr	Cys	Cys	Lys	Leu	Leu					
115							120								

```
<210> 1047
<211> 754
<212> DNA
<213> Homo sapiens
```

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<400> 1047
natgcccaga aggacctgga cgaggcggtg ccagccctgg atgcggctct ggccagccta
60
cgcaacctca acaagaacga agtgaccag gtacgtgcca tgcagcggcc acccccgggt
120
gtgaaaactgg tcatagaagc tgtgtgcatt atgaaaggca tcaagcccaa gaaggtgcct
180
ggagaaaagc caggcaccaa ggtggatgac tactgggagc ctggcaaggg gctgctgcag
240
gacccgggccc acttccttga gagcctcttc aagtttgaca aggacaacat tggagatgtg
300
gtgatcaaag ccatccagcc gtacatcgat aatgaagagt tccagccagc caccattgcc
360
aagggtgtcca agggttgccc cttcatttgg ccgtggggggg gggcaatgcc caagtacccc
420
tttgtggcca aggccgtgga gcccaagcgg caagccctgc tggaggccca ggatgacctg
480
ggggtgacac agaggatcct ggatgaggca aaacagcgcc ttcgtgaggt ggaggacggc
540
atcgccacaa tgcaggctaa gtaccgggaa tgcattacca agaaggagga gctggagctg
600
aagtgtgagc agtgtgagca gcggtggggc cacgctggca aggtgcgcac cctcctcctg
660
caaggcctgc aagcggggccc ggcccagaca ggggccagaa aggaccaggg cgccggtggg
720
tcctgggggtg gctgtccaac cccctccctg gcaa
754

```

```
<210> 1048
<211> 251
<212> PRT
<213> Homo sapiens
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<400> 1048  
Xaa Ala Gln Lys Asp Leu Asp Glu Ala Leu Pro Ala Leu Asp Ala Ala

1		5		10		15									
Leu	Ala	Ser	Leu	Arg	Asn	Leu	Asn	Lys	Asn	Glu	Val	Thr	Gln	Val	Arg
		20						25					30		
Ala	Met	Gln	Arg	Pro	Pro	Pro	Gly	Val	Lys	Leu	Val	Ile	Glu	Ala	Val
		35					40					45			
Cys	Ile	Met	Lys	Gly	Ile	Lys	Pro	Lys	Lys	Val	Pro	Gly	Glu	Lys	Pro
	50					55					60				
Gly	Thr	Lys	Val	Asp	Asp	Tyr	Trp	Glu	Pro	Gly	Lys	Gly	Leu	Leu	Gln
65					70					75					80
Asp	Pro	Gly	His	Phe	Leu	Glu	Ser	Leu	Phe	Lys	Phe	Asp	Lys	Asp	Asn
			85						90					95	
Ile	Gly	Asp	Val	Val	Ile	Lys	Ala	Ile	Gln	Pro	Tyr	Ile	Asp	Asn	Glu
		100						105					110		
Glu	Phe	Gln	Pro	Ala	Thr	Ile	Ala	Lys	Val	Ser	Lys	Gly	Cys	Pro	Phe
		115						120				125			
Ile	Trp	Pro	Trp	Gly	Gly	Ala	Met	Pro	Lys	Tyr	Pro	Phe	Val	Ala	Lys
	130					135					140				
Ala	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Leu	Glu	Ala	Gln	Asp	Asp	Leu
145					150					155					160
Gly	Val	Thr	Gln	Arg	Ile	Leu	Asp	Glu	Ala	Lys	Gln	Arg	Leu	Arg	Glu
			165					170					175		
Val	Glu	Asp	Gly	Ile	Ala	Thr	Met	Gln	Ala	Lys	Tyr	Arg	Glu	Cys	Ile
		180						185				190			
Thr	Lys	Lys	Glu	Glu	Leu	Glu	Leu	Lys	Cys	Glu	Gln	Cys	Glu	Gln	Arg
	195						200					205			
Leu	Gly	His	Ala	Gly	Lys	Val	Arg	Thr	Leu	Leu	Leu	Gln	Gly	Leu	Gln
	210					215					220				
Ala	Gly	Pro	Ala	Gln	Thr	Gly	Ala	Arg	Lys	Asp	Gln	Gly	Ala	Gly	Gly
225					230					235					240
Ser	Trp	Gly	Gly	Cys	Pro	Thr	Pro	Ser	Leu	Ala					
			245						250						

&lt;210&gt; 1049

&lt;211&gt; 558

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1049

cgcagcaata gctgcacttg accagactgg gctttgcaat aagcgcatc cccgggctga  
 60  
 atgctgcaga tccttacagg ctgactgcag ggtgtttcag attctcctgg agtcacacgt  
 120  
 gccagcttga tttcaagaaa caactagaat aacagttttc tgataagaag tctatagcac  
 180  
 tttatggctt acataatcca gagatagatg ggctgggcat gattcccatt ttctgttggg  
 240  
 gaaaccgact cacagagaag ttaagggaca agtataaagt gatgaaactg tgtactgaac  
 300  
 ctcatgtctc ccagactccc ggggtccccgg gctttttctc ggggcggccc cattcacatt  
 360  
 gcaattcatg gccggggcaa atgctcacc acagagatat taagcactcc aacactccat  
 420  
 ccaccaggtt gcagccaaag gattcagaag acaatgatca ttccatcagc atgcactatg  
 480

cagctaaaga aaggttttgg catgctctgc tttattgttt cacagaagat aagaaaataa  
 540  
 actgcaaagt aacttaag  
 558

<210> 1050  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 1050  
 Met Ile Pro Ile Phe Cys Trp Gly Asn Arg Leu Thr Glu Lys Leu Arg  
 1 5 10 15  
 Asp Lys Tyr Lys Val Met Lys Leu Cys Thr Glu Pro His Val Ser Gln  
 20 25 30  
 Thr Pro Gly Ser Pro Gly Phe Phe Ser Gly Arg Pro His Ser His Cys  
 35 40 45  
 Asn Ser Trp Pro Gly Gln Met Leu Thr His Arg Asp Ile Lys His Ser  
 50 55 60  
 Asn Thr Pro Ser Thr Arg Leu Gln Pro Lys Asp Ser Glu Asp Asn Asp  
 65 70 75 80  
 His Ser Ile Ser Met His Tyr Ala Ala Lys Glu Arg Phe Trp His Ala  
 85 90 95  
 Leu Leu Tyr Cys Phe Thr Glu Asp Lys Lys Ile Asn Cys Lys Val Thr  
 100 105 110

<210> 1051  
 <211> 317  
 <212> DNA  
 <213> Homo sapiens

<400> 1051  
 gcgttgagtc gggatgtcgc attcatgccc ggcgaacctt tttttgccga accggagcgt  
 60  
 aatccgggta atcttctgtct caatttcagt cacatcgcac cggagcgtct ggacgaaggt  
 120  
 ctcaagcgcc tggctgctgt catccgtcac gcacaggctg cacaagcggc ttaaggggag  
 180  
 ggccatgtac aaggtttatg gcgattacca gtcgggcaat tgctacaaga tcaagctgat  
 240  
 gctgcacctg ctggggcagg aatatcgctg gcacccgggg gacatcctca aggtgacacc  
 300  
 gagaccccgg aattttt  
 317

<210> 1052  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 1052  
 Ala Leu Ser Arg Asp Val Ala Phe Met Pro Gly Glu Pro Phe Phe Ala  
 1 5 10 15  
 Glu Pro Glu Arg Asn Pro Gly Asn Leu Arg Leu Asn Phe Ser His Ile



20 25 30  
 Ala Pro Glu Arg Leu Asp Glu Gly Leu Lys Arg Leu Ala Ala Val Ile  
 35 40 45  
 Arg His Ala Gln Ala Ala Gln Ala Ala  
 50 55

<210> 1053  
 <211> 318  
 <212> DNA  
 <213> Homo sapiens

<400> 1053  
 caattggcta cgcgatccga acgggcgcat ggggtctctat gactggcaag ccgtcgctcg  
 60  
 cggggagtgg gccctcgact atgcctacgc gatgtcggtg aacctgacca ccgagaaccg  
 120  
 gcgtgcctgg gaacgcgacc tgctcgagcg ttatctgtgg cgcctcgccg aagaggggtg  
 180  
 cgccaacccg ccctcgttcg agcaagcgtg gctacgctac cggcaacagc cgttccacgt  
 240  
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 Ala Trp Glu Arg Asp Leu Leu Glu Arg Tyr Leu Trp Arg Leu Ala Glu  
 35 40 45  
 Glu Gly Val Ala Asn Pro Pro Ser Phe Glu Gln Ala Trp Leu Arg Tyr  
 50 55 60  
 Arg Gln Gln Pro Phe His Val Gly Ile Phe Ser Leu Leu Thr Ile Gly  
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<213> Homo sapiens

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		20						25				30			
Ser	Gly	Leu	Cys	Pro	Gly	Gly	Leu	Phe	Pro	Ile	Leu	Gly	Leu	His	Pro
		35				40					45				
Trp	Gln	Phe	Ser	Leu	Pro	Ser	Gln	Val	Ser	Gly	Pro	Arg	Met	Val	Phe
	50					55				60					
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